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SOUTHERN TEXTILE BULLETIN

VOL. 29

CHARLOTTE, N. C., THURSDAY, FEBRUARY 11, 1926

NUMBER 24

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February 11, 1926

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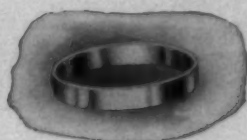
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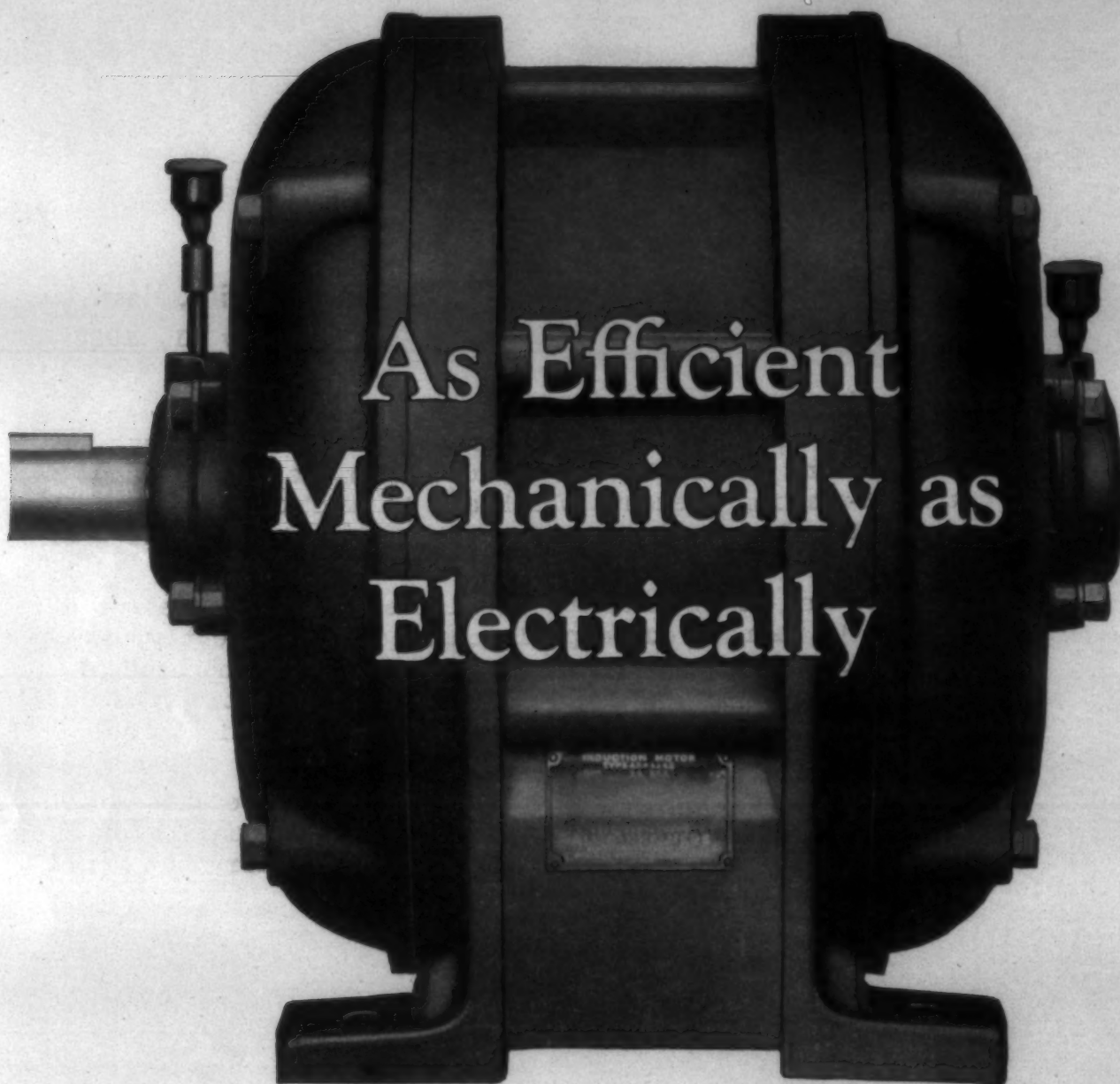
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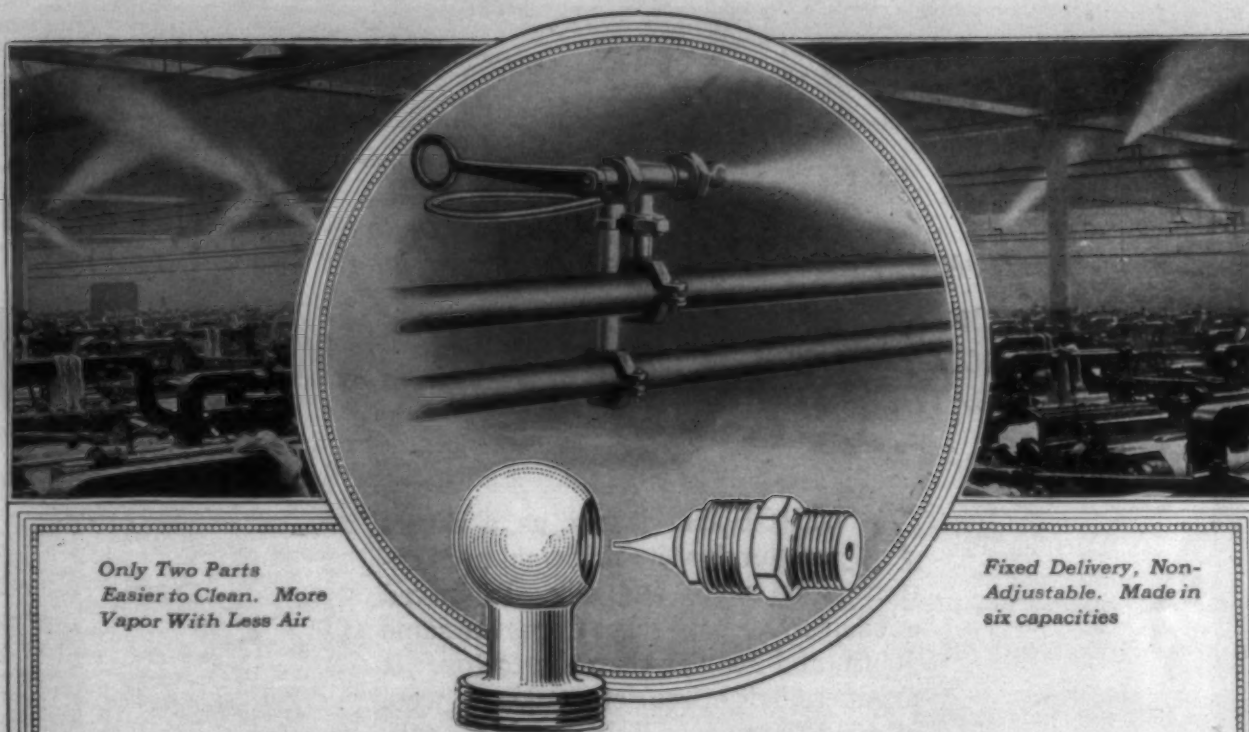
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SOUTHERN TEXTILE BULLETIN

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NUMBER 24

The Spinners' Meeting in Raleigh

THE meeting of the Spinners' Section of the Southern Textile Association was held at State College, Raleigh, N. C., February 5, 1926.

Chairman Carl Harris called the morning session to order and stated that Mr. Cobb, secretary of the Southern Textile Association, would take charge of the meeting.

MR. COBB: Gentlemen, we are certainly very glad to get the textile students interested in our manufacturing problems and to have this opportunity of meeting with them, and our hope in holding sectional meetings, as most of you know, but for the benefit of the textile students we will state that it is in order to concentrate on problems for one department. The result of the sectional meetings then of course are reported to the semi-annual meetings of the Southern Textile Association. Realizing that our efforts of practical manufacturing are somewhat at variance with the standards set up, we have recently been making some effort to get the theoretical man and the practical man together in order to set up tentative standards, so to speak, for the different things in the mill as relate to spindle, speeds, and draft, and twist, and things that we are not now, I am sorry to say, applying with the standards that are set up. For example, I believe it would be a task to find many mills that are putting in the standard as now laid down for twist in roving where they are making 30s warps from American one-inch cotton. Surely if the standard is wrong, the mills are certainly making a mess of it. Then, if it is a fact that the mills in the practice are not using the standards as set up, then there must be something wrong somewhere, either the standards are wrong or the mills are wrong. This brings to mind one particular question from the manufacturer's standpoint that I have in mind. I am confident if you should ask a number of practical spinners, that in the summer time during very hot weather or when their work happens to be running badly, if you put a turn of twist in roving it would help the running of their spinning. My prediction is that they would universally answer yes. On the other hand, theoretically, I believe that we should only insert enough turns of the twist in roving to keep the

roving from breaking back in the creel. Then there again somebody is wrong. Now, then, it is going to be quite interesting to have the theoretical man to come together to thresh out these problems, so to speak. That is a concrete example that theory and practice are absolutely at variance with each other.

Only a few years ago, I am sorry to say there was as much coolness between the theoretical and the practical as there was between men of opposite sides of the Mason and Dixon Line, but thank goodness the Mason and Dixon Line is ancient history and the practical man has found out that the theoretical man is his best friend.

Now, we have decided in talking with some of the North Carolina mill men last night, that it would be best to organize a North Carolina sectional meeting here today. From Mr. Harris' standpoint, he is not familiar with fine yarn, and the sectional meetings we have been having have been on discussion more or less pertaining to what we commonly call print cloth yarns.

That would be entirely foreign to you gentlemen here in North Carolina and vice versa. Therefore we think it would be very well to organize a North Carolina spinners' sectional meeting and let this meeting be known as the North Carolina Spinners' Sectional Meeting and to give it a start we have decided as general chairman of the sectional meetings to appoint C. M. Black as chairman of your next meeting, and L. R. Gilbert as assistant chairman. Those are temporary appointments, of course, and it will be up to you at your second meeting to elect your own officers. We hope that you will have a meeting certainly before our next semi-annual meeting so that you will have a committee to be at that meeting and report on your findings and discussions. If you will have a meeting within the next three months, we are sure you will begin to get interested in the work and see the great amount of benefit that you will all receive individually as well as your mills and that you will soon become as enthusiastic about the work as we are in South Carolina and Georgia. We will be glad to hear from Dr. Brooks. (Applause.)

DR. BROOKS, President of the State College, then spoke as follows:

Mr. Chairman and Gentlemen: I wish to welcome this body to the State College especially, though I feel sure that you have felt the welcome already, received it already. I wish to reinforce it again. I don't know how much benefit you can derive from the institution. That is problematical, but I am sure the institution can derive a great deal of value from you. That is not problematical because we are just now as you have, some of you and perhaps all of you, already seen in the act of enlarging the textile school, and I shall say just a few words on this subject.

What part shall the State College play in a great \$2,000,000,000 business, or I might ask you the question, what part shall the spinners play in a great \$2,000,000,000 business, for after some calculation it is estimated, I think fairly accurately that the textile business beginning with the seed as it goes into the soil until the fabric is satisfying my lady in her home, amounts to approximately \$2,000,000,000 a year, cotton business. Now let me come back to my first question, what part shall an educational institution play in certain enterprises involving mechanics, agriculture, chemistry, fertilizer, chemistry dyeing, designing, manufacturing, marketing, manners and customs of the people, the whims of the people, et al. Now what part shall a State institution play in this tremendous business? There is no other business in America that is comparable to it. I have in mind the steel business. That is all concentrated, you might say. You have a much narrower field, but when we come to the textile business we deal with the elements on top of the earth, under the earth, and in the heavens above, and in the whole human gamut, you might say, of desire. And it is the most chaotic business in the world outside of running the American government.

Some years ago I was in public school work, elementary and secondary, and was in the western part of the State. I was going to conduct a teachers' institute in one of the mountain counties and I was directed to go to a certain home where I could possibly secure board for the week, there being no hotel in the community. While the lady was making preparations to come down to negotiate with me, I was

standing in the little sitting room and there was a little center table, marble topped, in the middle of the room on which there was a large family Bible nearly as large as the top of the table. I was turning the leaves of that book, just waiting for the lady to come down. I saw a little child come into the room and she looked at me with some degree of astonishment and laid her hand on my arm which was on the table like this, and she said, "Mister, Ma don't allow nobody to mess with that book in this house." (Laughter.)

As I stated, the textile business, and I have been study it a little at odd times in the last few years and have about come to the conclusion that there is one division of the textile business that "don't allow nobody to mess" with that part of it. (Laughter.) But I think that we have come over into a period of co-operation when it is absolutely essential.

I would like to tell of the sweep of the business as I see it from the standpoint of an educational institution, not that I shall contribute anything to this meeting other than to give you an assurance that we see tremendous problems here and wish to make a contribution. In the first place, your business begins in the soil and hence we carry on here in the School of Agriculture a great program not only in giving instruction in what is known about the cultivation of the cotton plant, but are constantly carrying on research to what extent the fertilizer and the soil and the peculiar kind of seed that we have contributes to the value of the fibre which you must use, and I suggest that while you are here it would be a good idea if you would take to Dr. Winters about that end of the work carried on in connection with Professor Nelson here. I am speaking of research work and I am repeating in that respect what I said at Burlington at the meeting of the textile chemists. For instance, what value is it for you to know that cotton cured in the seed gives fibre more oil and greater length or whether the best thing to do is to gin it immediately after it is cultivated and turned over to you in the green state? We have some information on it. You have some information on it. I am not giving

you anything new, but suppose we can make a contribution in that way, co-operating with you, that is the beginning of the textile business. It begins with the farmer and the seed that he puts in the ground and against that is research—the value of the different processes of the work.

Come on to the next part of it. We have to touch that phase of the work and we are doing it in some instances well, and in others we are just starting.

Take your spinning, your next stage, we will say. That is your problem there, your part in a \$2,000,000,000 business. The thing that we are puzzling with and that you are puzzling with, is what is the nature of the fibre that you have just received. There you come to certain other research which we are beginning here, and the enlargement of the plant here is for the purpose of going further into that. Will or will it not take dyes? Who knows, and who knows why it won't and why it will? You have some practical knowledge of that which would be of value to us in research that we can carry on here when we finish the textile school in co-operation with you, and we want to know it. We want your co-operation in that, for without that it is useless for us to go ahead, for you stand at the lever of control in this entire business. Watch this, every stage of the process is full of a tremendous amount of research which must be in conjunction with the practical man. Theory and practice must go hand in hand. "Theory" comes from the Greek word Theos, which means God. That is knowledge, that is the truth, and it is not theory unless it contains truth. It is something else. We want truth with practice combined in the work.

Let's go to the manufacturing stage. We will broaden out there still further in the processes with not only your fibre which comes to you in yarn, from the yarns over in the process in manufacturing into fabric. You have mechanical processes which must be studied. A great deal can be done, for instance, in our mechanical engineering department co-operating with Professor Nelson, which is being done right now, but in addition to that, you have the dye problem, the strength of your materials, the nature of the fabric, and not only that, the designer, the man who must know the whims and fancies of our people. There is your process, with theory and practice again in a form of research that must be done either by you or somebody else. Otherwise you will be teaching old knowledge until the next generation, and somebody else is going to find some new knowledge. Can we work with you and help find that new knowledge? If we can, then we say that is our purpose. Then we will say that we have not enlarged the Textile School in vain. We do not think that we should go into a larger amount of manufacturing than we have been doing. All we are doing is to find the Theos here, the truth about these things, working with you in order that the truth may

find itself functioning in your daily operation and then you have truth where it belongs.

You can go further. You have your cloth made but here is a great field before you and somebody is going to have to change his market. Somebody has to study transportation and relation to the market; somebody must study the whims of the people and what they want in the different sections of the world, because your business has just begun when you turn it loose. When I say this, I mean the spinning end of it. It finds its home in my home, and when it finds its home there, and I am satisfied with the new material I have got from you, I have discarded the old, and so it goes. You might say it follows the manners and customs of the people more than any other industry in the world probably, and the manners and customs of the people are satisfied just as the result of the great textile business comes into the home and meets the needs whether the things is fanciful, or something pertaining to the elementary things in living.

So, gentlemen, no one division, whether domestic or mechanical, can live to itself alone. It is tied in, in my judgment, with the greatest social forces of the world. It is not building material like iron or wood; it is not power like coal and electricity, and yet it embraces all in its relationship in a way and touches the very essence of social life not only as to its elemental things but the fine arts in the home. Hence, there is no place from the cotton field until it is put into practical use that this institution should not try to make a contribution, and that is our mission, and I wish to thank you gentlemen for coming and I hope you will be able to visit and inspect our plant and make any suggestion, because our purpose is to co-operate with you. (Standing and applause.)

THE CHAIRMAN: I would like all the professors in the room to step forward and I would like to introduce you.

The Chairman then introduced Dr. Nelson, Prof. Hilton and Prof. Grimshaw.

THE CHAIRMAN: I heard a man express it last night. He said it is one of the greatest privileges he has to be able to work with these men, and I am assuring you these men have the industry at heart and are trying to turn out young men here who are capable of taking their places in the industry and they deserve our support.

SECRETARY COBB: I do not know but that we would get just about as much information as we would in discussion if we would keep Dr. Brooks going longer. He has opened up a new field of thought for me and I know he did for you. We cannot impose on him though; it takes up too much of his time. We would like to hear from Prof. Nelson. (Applause.)

PROFESSOR NELSON then addressed the meeting as follows:

I can only say on behalf of our textile school that we welcome you. We can add little to the welcome that has already been extended to you, it has been given you so whole-

heartedly. We simply bear out the statements.

We expect to go into research work in our textile school. We are at present teaching students who come to us principally from North Carolina and the Southern States and some from the North the regular textile courses as taught in every textile school. We desire to continue those courses and to go ahead, to go further, to give those men the advantages of the research work right from the beginning from the plant to the finished fabric and carry it on further.

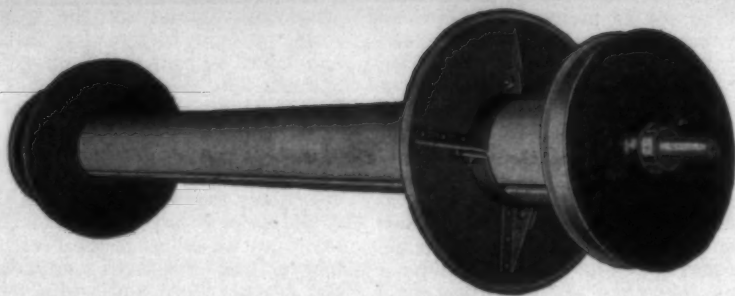
I sometimes think that we as mill men, and I class myself as a mill man, do not open up our industry to people of the world as we should. We are apt to refer to our industry, to the textile industry, to the manufacturing end of it, as something that does not require any scientific knowledge. When we go in the field and pick cotton and get those individual fibres, thousandth part of an inch in diameter, and less than that, every fibre independent of each other, and we have to take every fibre and put it together, parallelize each fibre and make the thread out of it, and you say you have a little bit of cotton yarn. It is a scientific business we are in today and must be treated scientifically. I claim there are as many scientific men in the mill business and working in our mills as in any other industry. It requires scientists of a certain kind to make yarn. Then again we speak of our designing. When we speak of designing, we think usually of designing of fabrics but that is not all there is to it. We must design a cotton yarn before we can make a serviceable cotton fabric. We must have a correct yarn and the correct proportions of yarn, warp and filling, if we are to make a serviceable fabric. What has made that cloth which we have heard so much about these last few years, broadcloth? It is generally admitted that English broadcloth is one of the best fabrics that has ever been made, but I am satisfied that even though we give them credit for that cloth, I am satisfied that we can in this country, and do and are at present making as good broadcloth as they make abroad. I might say there is an exception to that in the very finest yarns, but only with that exception. I do not hesitate to say that we in this country are making fabrics in general as good as the imported. It is an interesting study to study the fabrics that are imported in America. Those that come from Britain, France, and Germany,—we are not getting many fabrics from Germany at the present time, but they are coming up, importations are increasing. They have now a wonderful reputation for fabrics made from waste. The English fabrics are not quite as fancy as the French fabrics, but they are fabrics such as broadcloths, and that cloth has had a tremendous demand. It created this demand because it was worth while and so would go under the fancy cloths of France that require designing to make those cloths, the expensive cloths, the fabrics that sell from \$10, \$15, to \$20, to \$30 a yard. When we get into those fabrics we are getting into fabrics that are only expensive,

but beautiful to look upon, and we want to remember this, that those fabrics are generally made not on power looms—I am speaking of cotton, not silk, and tapestry, etc.—those fabrics are made on handlooms, hence the cost. They are useful in that way. We use them in order to get ideas, and that is one thing in which the French at the present time, predominate, and that their designers put all the thought—I am speaking of cotton cloth,—into bringing out new ideas, new cloths, and so we go up. Now, that same thing will happen in this country. If we can train the young men to have a vision, to look forward and see if possible what the people want, we will progress. Of course, these finer fabrics that are imported are very limited. They do not come into this country in tremendous quantities. They are very limited because of their value and because they are made in these small quantities for just as soon as a novelty fabric is taken up by the people at large it is no longer a novelty or specialty fabric.

I would like to say a word about our school again. We are open to make our school a school which will be of real service to the mills. We want every mill man to feel that he can come to our school and if he has any problems which he would like to have us help solve, we want him to come to us. We want also to feel that we can depend on your co-operation along those lines, feel that we are turning out young men who will eventually go out into your mills and ask your co-operation when we send them out so that you will help them. Of course, we know that young men who go out from the school have not had the experience that you men have had. Experience can only be gained by actual work.

We expect to put in our school an experimental laboratory, a research laboratory, and an experimental laboratory where we can make these tentative standards such as have been mentioned by Mr. Cobb. As you know, there are no standards for making cotton yarn. Take a mill makings 20's or 30's or any number of yarn, there are no two mills alike, no two mills that will make that same yarn from the same organization. They are all different, all after the same end, though. If we can get some general standard from which to build, then we will have gained something, and we are hoping to take our machinery which we shall install in our school and make these different tests. We have done some of that in the past, quite a little. I was looking up a report where 20's yarn was made and the student took different rovings and put that roving, the different rovings through the different fly frames and spinning frames, making the 20's yarn and he started on slubber and put the different numbers to get the different twists in his roving and slubber, intermediate and fine frame, and found that made the 20's. He started with the spinning frame and did the same thing; he started with 3½, went to 4 and the 5 up to 8 which you know is getting into hard twisted and it is interesting to note when he got his 4.75 right through he had the best breaking strength of all the

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yarns that he made. Is he correct? We cannot say absolutely. That is one thing we want to try and prove, to demonstrate, when we get our new textile school we are hoping to lay aside a room in that building 25x75 and to equip that as a little cotton mill so that we can regulate moisture, get atmospheric conditions such as they have in the mill, and then the tests made there we think will be worth while. We ask your co-operation and co-ordination. Co-operation I must say is getting something like efficiency, and you know what efficiency means,—when a man comes into your mill and says he is an efficiency man. After the war, we got tired of that word, but it is getting the same way with co-operation because unfortunately co-operation is all right if everybody would co-operate, but we find some folks that co-operate all right if you agree with them, but they don't want to co-operate with you. We want your co-operation and we want to co-ordinate our work and we want you to come and see us and we want you to offer your suggestions to us and tell us anything you would like us to do. We cannot say that we will do it, but we will do all we can. Come and meet with us. This morning Mr. Clark talked with some of our students. We want to welcome any of you to come and talk to our boys. We will be very glad to hear any of you.

THE CHAIRMAN: I am sure that we appreciate the remarks of Dr. Brooks and Prof. Nelson and it has given us all a line of thought that

we did not have and which it is well worth our while to consider.

Before we start, I would like to pass out these slips and like to get a registration. We would like for you to sign your name, what mill you are with, and put the numbers of the yarns that you are spinning. I do not want any particulars about that yarn, but would like to know the numbers of the yarn you are spinning so as to get some ideas of the numbers represented here.

Mr. Clark has suggested that we stand up one at a time and give our name and what mill we are with.

I want to say that I am glad to see so many of the textile students here, and I believe we can all get a great deal out of these discussions.

THE CHAIRMAN: I am mighty glad to see as many men here this morning as there are and considering the fact that this is one of the first meetings of this section, I do not think it is necessary for me to go into details trying to explain the object of these meetings because we are all acquainted with the proceedings of these discussional meetings and I do not think that I ever saw even as many as two mill men get together without talking shop. I think that they are the worst, or I will say the best about that of anybody I ever saw. That is what we are trying to arrive at this meeting, at these meetings, to get together and have discussions of the problems that we encounter just as though you were talking with your friend. In other words, last night

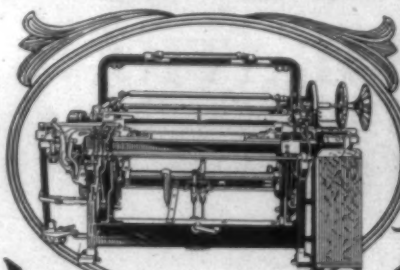
at the hotel, six men got together and they had a regular meeting. It didn't start with that intention at all, but it drifted from one thing to another and it was really fine. That is exactly what we want to do this morning, so being familiar with the problems encountered by you men up here, I would just like to open the house for discussion of any thing that you would like to bring up, and we will try to be of assistance to you. I do not mean to say there is anybody here who can answer your particular problem or tell you what to do but it is an idea that you may get something as a basis to work on, so the house is open for discussion.

MR. GILBERT: One thing there is some difference of opinion about is the setting of the spinning rolls. What we want to know is, how far apart you should set the spinning rolls on inch cotton, for instance, and what do you call inch cotton? We can take that blackboard. There is something in the setting of the spinning roll. We will take the blackboard and draw on there a little swatch of cotton and then let everybody say what he thinks about it and we will have Professor Hilton say what he thinks is the best practice in that. We have a real carder and spinner here and while we are here I want to reintroduce some of the professors here. They have a real carder and spinner who is at the service of North Carolina mills, and I mean he is a real carder and spinner and not a man who knows a little about it and he can set it up right.

At the head of the department we have Professor Nelson, who as a weaver and designer, has no superior in the United States. He is at the command of the State of North Carolina at any time you get in a hole with your weaving or spinning or carding. Either of those men will be able if you need them to do just the work that you want done. In their dyeing and designing department they have wonderful men. They have a man designing who is an artist, one of the best that I have ever known, and you will be doing the best work you ever did if you will use the textile college of the State of North Carolina more than you have been doing.

THE CHAIRMAN: While Mr. Gilbert is drawing that, what is the general practice as to first or second roll setting in the spinning room? What do you allow over the length of the staple? Some say 1-16, but what is the general custom? Mr. Dilling, what is your custom on that?

MR. DILLING: Mr. Chairman, I do not know that I can give that. There have been so many innovations in setting rolls and in using a light roll in the middle. The roll that is weighted I think the general practice is from 1-16 to 3/4 inch, depending on the amount of stock that is used. The more stock, of course the longer it should be. The smaller amount of stock the closer you can set them and then there is something in the character of the cotton, as to its uniformity. Uniform cotton can be set closer and



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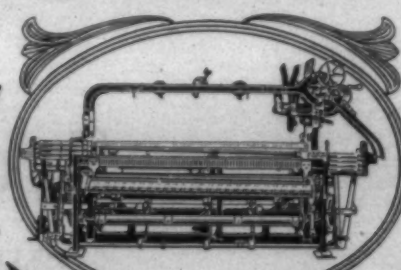
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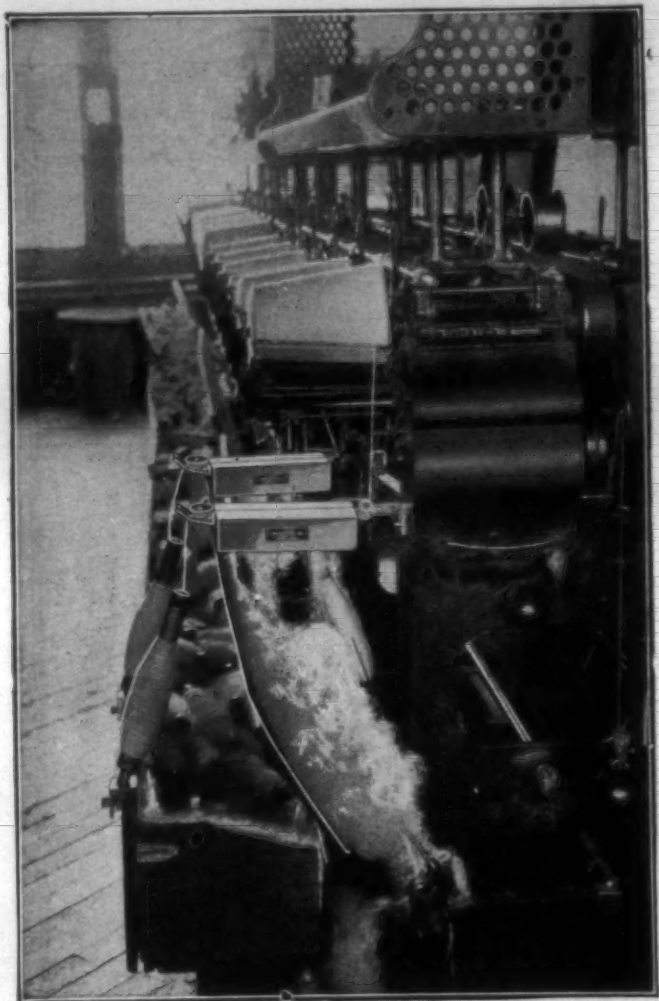
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we have had certain kinds of cotton in the last few years that run more uniform than we used to have, especially the cotton that comes from California and Arizona that is produced in irrigated country where they can make the weather what they want it. There has been so much improvement in other sections, too, that it is more uniform than it used to be, but I think from bite to bite not from the center, but bite to bite of the roll is best.

MR. GILBERT: That is the reason I brought this up, because I wanted to find out, wanted Professor Hilton to tell what he found relative to that. That is the general practice but it is not considered the best way to set the roll now. Mr. Dilling, there are your long fibres that you cannot get out. In other words, these are the ones you would cut off with a pair of scissors if you were selling it. If you were buying it you add a little something to it here, but here is the actual fibre. Do you mean that you would get 1-16 of an inch beyond where these marks are or 1-16 of an inch beyond the outside here?

MR. DILLING: You put a hard question when you ask that.

MR. GILBERT: Is it A or B? (Referring to figures on the black-board.)

The figure represented a cotton sample, with the longest fibres designated by A, the shortest by B, and a point half way between by C.

MR. DILLING: You are extreme on your markings as to length.

THE CHAIRMAN: B is what you would pay for, and A what you would get. (Laughter.)

MR. GILBERT: We would set 1-16 of an inch beyond this or—

MR. DILLING: I think that the center mark would come closer—1-16 to $\frac{1}{4}$ of an inch from the center mark. If you go where you would set for the next staple the majority of your staple would be too short for that. I think that thing is what brought about the one weighted roller. My roll is light enough to pull out without damage to it.

MR. REYNOLDS: There is only one way to set the rollers if you want to make yarn. I do not know much about it but I have been at it all my life and all I know is making cotton yarns, and that is just as close as you can get them. For every 1-16 of an inch you set them wider than you possibly can set them on Whitin, Lowell-Saco-Lowell or any other machine with a $\frac{1}{4}$ roller you will make yarn 5 pounds weaker. The only way to set for inch cotton is as close as you can get them.

MR. GILBERT: I think he learned something in his years in the mill. What is the best practice, Professor Nelson?

PROF. NELSON: As close as I can without getting the roving through. The further I get away the more uneven the yarn.

MR. GILBERT: What do you consider the staple?

PROF. NELSON: "C" in that case, the bulk. Some will go as low as $\frac{1}{4}$ and some as high as 1-16, but 80 per cent will run inch cotton. You have to get the very longest staple anyway. 1-16 of an inch over the

bulk will take care of everything, I think.

MR. GILBERT: You think 1-16 over "C" or "A"?

MR. DILLING: For ordinary light numbers 1-16 over "C" would be best. If you run something very heavy I think you would want to get more than 1-16. "C" is the average.

MR. GILBERT: How many with "C" is right, 1-16 over this, the bulk of cotton here and go one-half way between the bulk of cotton and 1-16 over that? How many think that is right, raise your hands. I see about 7 or 8 hands. How many think that you should set your rolls to "A" from here to here? Raise your hands.

THE CHAIRMAN: David Clark thinks so.

MR. GILBERT: How many of you think you should set your rolls to the extreme outside? Nobody seems to think so and only half a dozen think it is 1-16 over "C," so I don't know what the others think.

PROF. NELSON: If you get as close as you can to your longest staple so you cannot get cotton yarn through you are O. K. If you start getting bunches through there your rolls are not far enough apart.

PROF. NELSON: It will be about the same as "B."

MR. GILBERT: If anybody does not agree as to 1-16 over "C" let's hear. "C" would be the bulk of cotton plus one-half the length of the longer fibres. From here to here is not much cotton, it is just the long fibres that you have not pulled out. If you get the real body of the cotton it is "A." The reason I want an opinion on that is that what the spinners' meeting is trying to do is to get an average of what all you men think about whatever subject we bring up, that it may be put down as a tentative standard to go into the minutes of the association. If the spinners' section of the Textile Association thinks 1-16 over "C" is right and that is what they are practicing, 1-16 over "C" would be right so far as the spinners of North Carolina are concerned, and that is what we want.

THE CHAIRMAN: I have found this, that I believe it best to break some of your long fibres. How about that, Professor Nelson?

PROF. NELSON: The more fibres you break the weaker your fabric gets. I am taking it as if it was all weighted.

THE CHAIRMAN: In saying that, I believe one of the best things I have done in the last twelve months is to go into that thoroughly. It has improved our mill more than anything else we have done. We went into the card room—we will take a basis of "C" on our slubbers that was making 74 hank roving and allow $\frac{1}{4}$ inch over staple, on intermediates allowed 3-16 and speeders $\frac{1}{4}$; went to the spinning room and closed, as the gentleman said over there, as close as we could get. We are supposed to have full inch cotton and I called that inch cotton. I do not know about the full, but it is inch cotton. It is so flat. In other words barely 1-16 from bite to bite over an inch. You may not say that we are breaking any fibres but I think we are, and it has in-

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A MEMBER: On your drawing there, is not "C" approximately the same as the right hand line of "A" over to left hand "B"? Is not your distance "C" approximately the same as that?

MR. GILBERT: I do not know. I did not draw with that intention. It seems to be exactly the same.

MR. HADDOCK: What is the advantage of going 1-16 over that? That takes in your extreme—1-16 of an inch over "C."

MR. GILBERT: I don't know. That is what I am trying to find out.

MR. HADDOCK: "C" covers the extreme in your fibre and I cannot see any advantage going further than that.

THE CHAIRMAN: The projection here does not project over here, but the length of staple is from the body here to the tail at this end.

MR. HADDOCK: My idea is what is the advantage of going further than that?

MR. GILBERT: I do not know. That is the point. Personally I would set the roller at "C."

MR. HADDOCK: That is my idea exactly.

MR. GILBERT: That would give you from right there beginning at the bulk of the cotton to here.

MR. HADDOCK: Yes, then you have covered the extremes in your staple and I cannot see the advantage of going further.

MR. REYNOLDS: The fibres that stick out at the right hand side of

"C," there is the end of those on the left hand side? You mean the fibres on the left and right are one fibre?

MR. GILBERT: I hardly think so. This would be tangled up in here and you would not be able to get either side exactly smooth unless you pulled out to "A."

MR. REYNOLDS: If you go to the bottom of "C" you are setting a little bit over the bulk of the cotton.

MR. GILBERT: Yes, from here to here. If you bulk this off you are setting the balance off way on the other side.

MR. DILLING: Some of the longer fibres would be the extreme end on either side, probably 75 per cent of it, dependent on the character of the cotton, would be "C" and 10 would be from "A" to "A." 75 to 80 would be "C" or half way, another 10 per cent would be down and maybe 20 per cent would be down to "A."

MR. GILBERT: If the per cent of stock was specified it would take a different turn. "A" is 90 per cent of stock or less. If there is only 10 per cent you should break them, if you are after strength. If you want something else but strength you'd better take that into consideration. I would say that was not generally understood. This "A" is 90 per cent of stock and 90 per cent is as short or shorter than "A" and this out here is just fibre that you get in pulling in cotton. Here is the bulk of the fibre.

A MEMBER: What length is represented by "A"?

MR. GILBERT: Inch, $\frac{1}{2}$ or whatever you want it.

MR. REYNOLDS: I want to ask in getting ordinary inch cotton what per cent of that are we supposed to get inch fibre?

THE CHAIRMAN: Professor Nelson can tell us that. The English are the only ones that set the standard.

PROF. NELSON: It is all supposed to be inch. It depends whether buying or selling on that. (Laughter.)

DAVID CLARK: The man that goes minutely into that is Oliver Murphy of Alabama. He goes through a regular system of taking long fibres on down and making slides and photographs. You can find photographs in his mill just how the fibres run, from inch to $\frac{1}{2}$ and they do not average over $\frac{1}{2}$. It is astonishing to see. If you pull cotton with the best men in the country it will run as low as $\frac{1}{2}$. They do it very systematically there and anybody can see the photographs any time.

MR. DILLING: I believe the way to get the greatest strength out of the yarn is to set the rollers as close as possible, but when you do that I do not believe you make as smooth and silky a strand of yarn as if you set them wider. You may not get the same strength but a better yarn. It will look smoother and have a more silky appearance and be better for some classes of work. In some classes of work the breaking strength is not the only essential. In weaving yarn the

breaking strength counts more but in some other classes appearance has about as much to do as breaking strength.

MR. ISLEY: I want to agree with Mr. Dilling in the point that he brought out. I have had 35 years' experience. If set as close as I can set them—I would have to close or open my rollers when the cotton is all bought from the same staple, as sometimes it will be a little short and start wrapping around the little roller which shows it is too close. You have to open up if you get too close, set as close as you can without making cockly yarn.

MR. GILBERT: We want to hear from other men so that we may be able to set a standard. There is a man going around doing all the good that he can. If he gets an order he appreciates it, and if he does not he always comes back with a smile on his face. Peter Quinn knows how to set rolls. We will hear from him on the subject of roll setting for a minute.

PETER QUINN: If you set them wider you will get weak yarn. What they are doing today is to take the weight off the middle roller and put on one piece saddle and close up the rolls. That is what they are trying to do today.

THE CHAIRMAN: From the registration the majority are more or less on yarn, and we would like to get some expression from them.

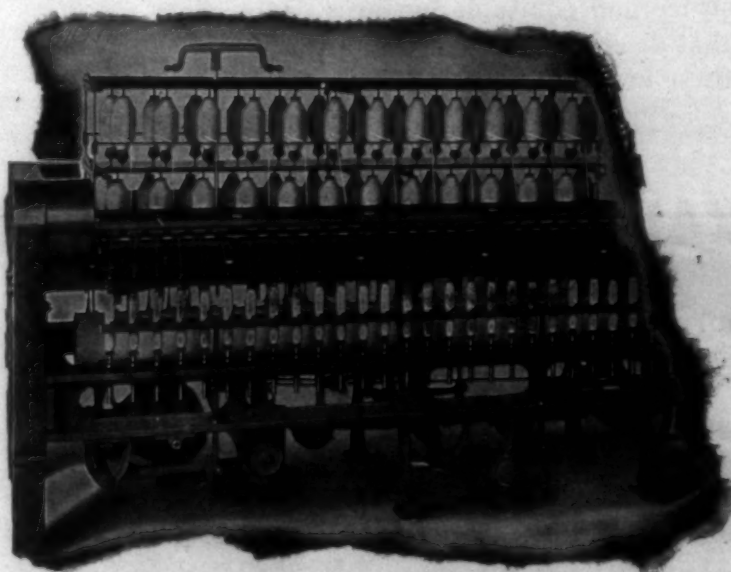
MR. McCOMBS: I do not see how you can set a standard on inch cotton unless you set it for certain

(Continued on Page 18)

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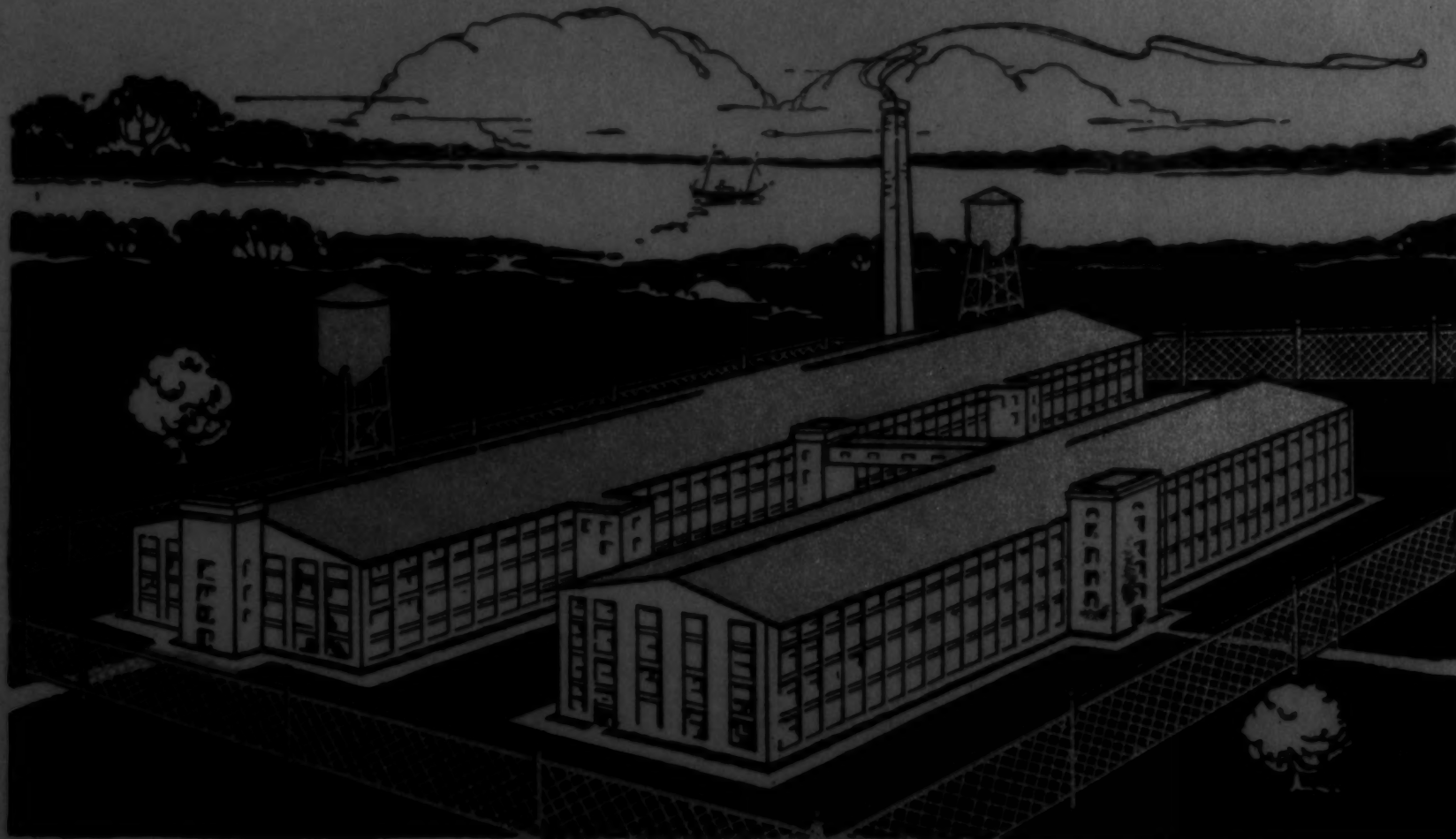
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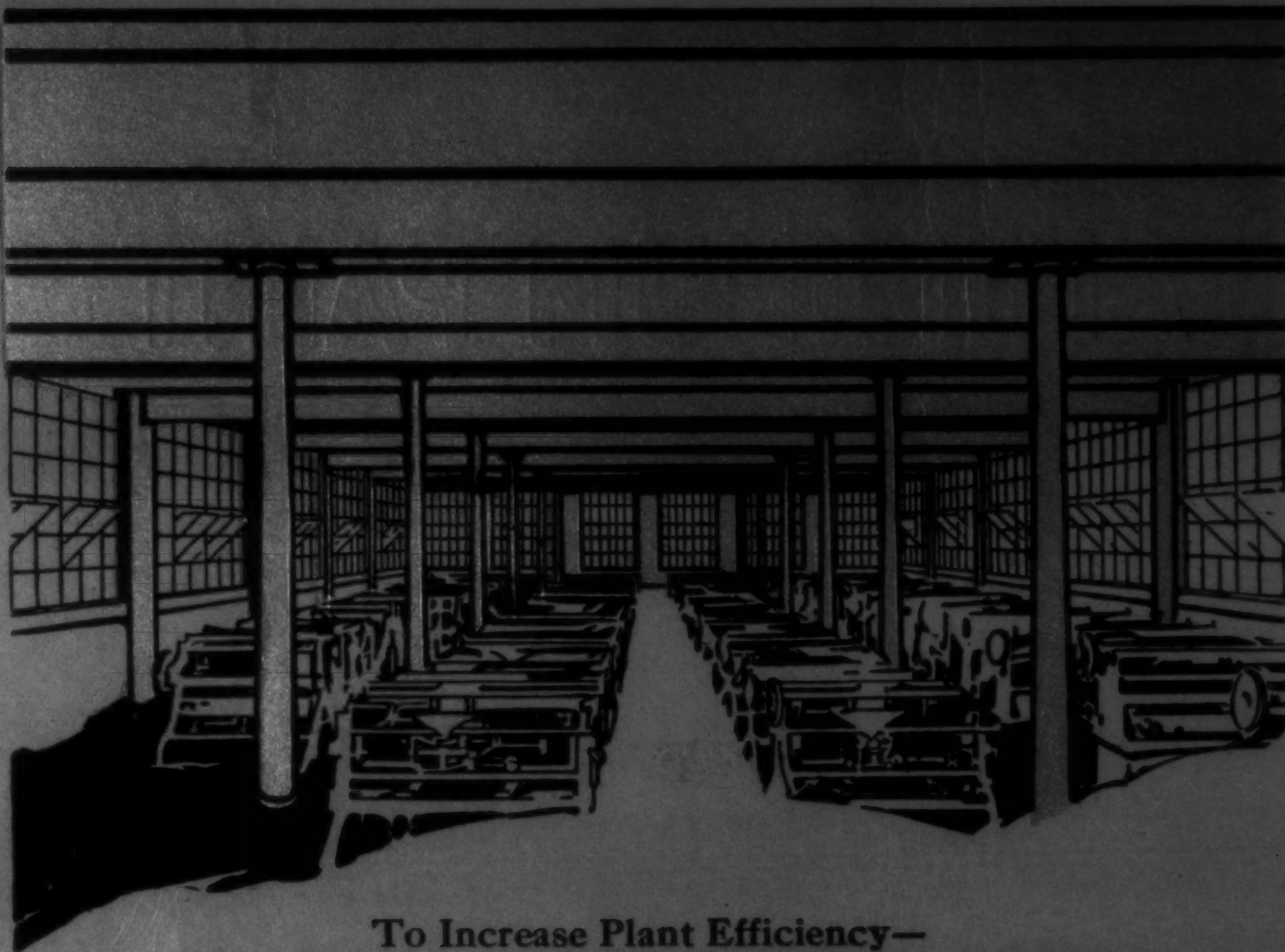
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HOUGHTON

SUPERFICIALITY

A Harangue

by Chas. E. Carpenter,

Near Editor of

The Houghton Line.

SUPERFICIALITY means lying on the surface and not penetrating the interior.

Superficiality is the trouble with many of those chaps who pose as scientists. They have a little knowledge of the surface of things, but there is no depth of penetration to what they know.

These four-flushers, who so frequently pose as experts, are usually afflicted with superficiality.

Those guys who can use big words and look wise and do nothing, are afflicted with the disease of superficiality.

That class of flappers whose outside garments are of the latest craze, but whose undergarments would not stand inspection, are cursed with superficiality.

Superficiality means, "all on the surface," in my language.

And superficiality is the trouble with most cotton softeners.

They are all right so long as their behavior on the surface is considered, but they do not go into the interior of the warp.

It should be ever kept in mind that both cotton and wool are most effective filtration agents. That is to say, that liquids which pass through the pores of these fibers are apt to be freed from much which those liquids may carry in solution. Bone-black is one of the strongest filtration agents known

and if a cotton softener, or warp conditioner, were passed through a column of bone black seven feet in height, the very first thing that would appear at the bottom of the filter would be pure water that terrible adulterant of which Ben Nit makes so much but which unfortunately is necessary as a solvent for the softener. The bulk of the real softening elements would remain in the bone black and if perchance the Softener had been combined with the size, all of the starch, or other sizing elements, would remain in the bone black.

Likewise with cotton the tendency of most softeners is to permit merely the water—that terrible adulterant—to penetrate into the warp and leave the other ingredients on the surface to flake off in the weave room.

Such softeners add to the warp but little lubrication and therefore but little additional strength.

The major portion of their effect is superficial. They are affected with superficiality.

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Napping Heavy Weights.

Editor:

I am a napper boss and I am having much trouble with the napping of heavy weights, like cottonades, etc. What is the best method to pursue to get a good nap and retain strength in the cloth. I would surely appreciate it if some napper expert would advise me in detail on this important matter through your columns.

Napper.

Changing Cloth Weights.

Editor:

When my cloth weights are too light or too heavy, how much should I change the filling to make it right? The other day my cloth was too heavy by 4 per cent. I changed my filling about 4 per cent lighter, but it hardly made an impression on the cloth. Why is this?

Shuttle.

Changing Yarn Numbers.

Editor:

In changing gears on a spinning frame, can you explain the reason why the figured draft gear does not always give me the yarn number that it figures. Sometimes I figure that it requires five teeth difference, when in actual practice it may take only 4 teeth or even 6 teeth difference. Is it better to guess the required draft gear are to figure it out?

Spindle.

Uneven Yarn.

Editor:

I would like to have some reader help me out of trouble with uneven yarn. I am making 30s warp yarn and it has thick and thin places about evenly divided. I have a 5.70 hank roving, made from three-quarters to seven-eighths inch cotton. My draft is 10.50. The front roll is 1 inch and the middle and back rolls $\frac{3}{4}$ inch. I have three rolls, both top and bottom, closed up. I use a $1\frac{1}{4}$ -inch ring, 7-inch traverse, 1-0 travelers. The front roll speed is 92 revolutions. I have a Draper No. 2 spindle band drive. The carder has his rolls closed up. I am using 4.75 twist constant. What can I do to make the yarn more even?

Mr. Help.

Answer to C. Q. P.

Editor:

Yes, plied twines, etc., can be readily reduced to single yarns again. The turns per inch should be carefully counted. Then the yarn should be untwisted on a twister which has been geared to untwist the yarn the same number of turns per inch that was originally twisted. Then the

The Practical Discussion Department of the Southern Textile Bulletin is open to all readers whether they are interested in seeking information on technical questions or are willing to help "the other fellow" who has experienced trouble in some phase of his work.

The questions and answers are from practical men and have often proved extremely valuable in giving help when it was urgently needed.

The interchange of ideas between superintendents and overseers develops a great deal of worth while information that results in much practical benefit to the men who are concerned with similar problems.

You are invited to make free use of this department and to join in discussing various problems that are mentioned from week to week. Do not hesitate because you do not feel that you are an experienced writer. We will take care of that part of it.—Editor.

untwisted plied yarn can be separated by being spooled on two or three or more spools at a time slowly, depending upon the total number of ends which were doubled or plied in the first place. Care must be taken not to strain the yarn during these reducing processes. It will help the processes to dampen the yarn some.

After it is reduced to single yarns again, it should be allowed to stand on the spools for a few days to set it straight again. That is, when this yarn is untwisted it will be rickracky or spirally and it will need to be set to destroy the affect of the first twisting operation.

Ala.

Answer to Mr. Filling.

Editor:

In answer to Mr. Filling regarding filling slubbing off in weaving, I do not know what numbers he is running on, but the chances are that he is running his traverse too slow. For 40s filling, he should have the cam shaft, with a 3-point cam, make one revolution every one and one-half minutes, and should have the fast motion on the down stroke. If he has been having the fast motion on the up stroke, he may have more trouble with the ends breaking down when the changes if he does not use a lighter traveler, but if he will adjust his traveler his work will run just as good if not better.

As a rule, when spinners have trouble with yarn slubbing off, they use a heavier traveler, but this will only make the work run worse and will not do him any good. The cams should be examined to see if all the points are the same distance from the shaft. If you have a 3-point cam and one point is farther from the shaft than the other two, it will cause one stroke to be lower on the quill than the other two, which will cause the yarn to slub off.

Humidity has a great deal to do with filling slubbing off, as it takes less humidity on filling than it does on warp yarn, because there is more stock passing through a warp frame than through a filling frame and we will sometimes cut off our humidifier heads on the filling frame and leave them off longer

than we should and when it gets dry, the yarns will not lay as well and will slub off.

To make a good bobbin on filling, we should run with all the humidity we can stand. When the room is dry, bobbins will jump up worse, causing the filling to slub. If you have more slubbing on dry days than on rainy days, you have not been getting enough humidity.

Do not run the frames too full, as this will cause slubbing. Running the traverse too low on a feeler quill will also cause it.

Have the cloth room man give you the number of pieces of cloth each day in which he finds filling slubbing off and then you will know what kind of progress you are making towards getting it stopped.

Sometimes bad piecing after doffing will cause slubbing. There is also a number of other things that will cause it, but if you will give the points I have mentioned a fair trial I am sure it will prevent slubbing.

Experience.

Answer to Up and Down.

Editor:

Regarding what breaks the ends. I for one, am very glad to have this question asked, and am pleased to try to give "Up and Down" some information.

There is a long list of things which causes the ends to break down on spinning frames. No end ever breaks without a cause. If the cause is removed then the end will not break. Many spinners are not trained to ascertain for themselves what it is that breaks the ends. Most of them simply piece up end after end without giving any care to see what breaks the ends. Sometimes a spinner will actually piece up the same odd ends that break down over and over all day long.

Therefore, I believe that this timely question should be well aired out in these columns.

Below I will attempt to give a list of some things that breaks the ends down:

Thin places in the roving, thick places in the roving, clearer waste raises the rolls, other waste which raises the rolls, over-worn travelers, over-worn rings, not enough twist, too much twist, too much draft, not

enough draft, cracked rings, ring not fully seated, ring rail out of level, frame out of level, improper humidity, room too cold or too hot, speed too high, speed too low, travelers too light, travelers too heavy, travelers do not fit the rings, rings too large, low grade cotton, dull steel rolls, wobbly steel rolls, dirty steel rolls, dirty top rolls, wornout top rolls, damaged top rolls, top rolls over-oiled, top rolls insufficiently oiled, hard twisted roving, soft twisted roving, single twisted roving, double or thick twisted roving, staple of cotton too short, rolls set too close, rolls spread too far, traverse motion not working, traverse motion swelling, ring rail run too high, bobbins filled to full, roving traverse too long, roving traverse too short, roving trumpet blocked, spindles not set, rings not set, thread guides not set, thread boards too low, thread boards too high, separator blades hitting rings, over-worn spindle whorl, over-worn spindle bolster, over-worn spindle other parts, dry spindles, slack hands, stretched roving, bobbin skewer with blunt end, creel steps gone, bobbin skewer caught on roving, waste flyings, wind drafts, mixed rings, bobbins too small, injured bobbins, creased thread guides, bobbins out of balance, bobbins filled with waste, spindles waste bound, rusted thread guides, rusted rings, not enough weight on top rolls, back saddle off, saddles not oiled, saddles dirty, too much weight on saddle, over-worn cap bar fingers, rolls not set in line, top rolls not on center of steel rolls, wobbly gears, over-worn draft gears, teeth out of draft gears, draft gears set too deep, draft gears slippin, over-worn steel roll necks, bent steel rolls, cut roving, cut yarn, poorly covered top rolls, steel rolls not at proper angle, twist gear slipping, mixed roving, mixed travelers, shaky floors, bent cylinders, bent spindle, rings out of round, mixed bobbins, ring rail runs too low, dirty travelers, spindles run dry or oil too heavy.

I have given over 100 causes for breaking ends. But there are possibly 99 other things which cause the breakage of ends, and other experts may be able to give us an additional list.

Charleston.

Answer to Mr. Filling.

Editor:

In answer to Mr. Filling regarding slubs, I will advise him to see that all the cams on the frames are in good condition and to set them so they will be going faster when the traverse rails are going up. Run the rails as fast as possible without causing ends to break down. Run as heavy a traveler as the stock will stand without making bad running work. Have as much as $1\frac{1}{2}$ -inch taper on build of quillers.

If he still has trouble with filling slubbing off, I would advise him to do as I did several years ago when

I was having the same trouble. After I looked over all the frames and was still being called to the weave room on account of stubs, I happened to notice that the trouble had always been on a certain section on one weave room, while all the other looms were going all right. I mentioned this to the superintendent, who was a practical weaver himself. He told me he would have the power regulated on the looms. I do not know what he told the weaver or the loom fixer, but the trouble ceased without any further remedies in the spinning room. If Mr. Filling takes my advice I would like to hear from him through these columns. South Carolina.

Height of Thread Board.

Editor:

As there does not seem to be any uniform rule or method to set the height of the thread boards above the spindle tips, will you please submit this question to your readers for discussion? I have noticed in many different mills that the height of the thread boards is not a matter of uniform setting. As this matter has not been discussed I would like to hear from some superintendents and overseers regarding it. S. C.

Explains Viscose Dyeing

The progress made in the dyeing of viscose and some of the difficulties which the process presents were discussed recently in a lecture given by C. M. Whitaker of Courtaulds, Ltd., before the Worshipful Company of Dyers in London.

"Viscose silk dyeing is being very cavalierly treated," said Mr. Whitaker. "It is usually dismissed in a few paragraphs at the most in which it is stated that artificial silk is dyed like cotton with one or two important qualifications that a larger volume of liquor and a lower temperature was used." Mr. Whitaker considered such a statement to be one of the greatest half-truths, because the first lesson one learned when undertaking the dyeing of viscose yarn was to forget all that one knew about the dyeing of cotton.

The difficulties encountered in dyeing viscose yarn were, he said, first, mechanical, and secondly, chemical and physical. The mechanical difficulties might be subdivided into manipulation and penetration difficulties. The two important things to be guarded against in manipulating viscose yarn were strain and friction. If a yarn were strained after it had been dyed, when it appeared in the final form of fabric those strained places reflected the light in a different manner from the normal places, and produced bright spots running across the fabric. If, on the other hand, the yarn were severely strained before it was dyed, when it was dyed the strained portion would take up the dyestuffs to a different degree from that which was not strained, producing light and dark pitches.

Very little hand dyeing was done by Courtaulds, as against machine

dyeing Mr. Whitaker, however, emphasized the importance, in hand dyeing, of using a very smooth stick, in order to avoid fretting of the yarn through rubbing on rough surfaces. The sticks he used consisted of steel tubes overlaid with a covering of hard rubber, polished smooth. It was also necessary that dyeing system should be perfectly smooth, and Monel metal systems were common in this country and the United States.

Mr. Whitaker expressed the opinion that hand work was inferior to machine work. There were two types of machines used for dyeing viscose yarns. In one the yarn was stationary, and the dyeing liquor was circulated through it. The other type of machine, which Courtaulds used was an adaption of the original natural silk skein dyeing machine. It consisted of porcelain rollers, upon which could be placed 3 or 4 pounds of artificial silk. The rollers were rotated mechanically on a crank, which gave the yarn a throw in the dye liquor, and ballooned it out. They rotated in one direction for about one minute, and then automatically reversed, so that if there was a good chance of freeing it. Each skein made two complete revolutions in one minute.

Ranlo Mill Banquet

Ranlo, N. C.—The overseers, second hands and section men of Ranlo Manufacturing Company held their annual banquet here at the mill club house with Superintendent J. A. McFalls as host and acting toastmaster.

At the appointed hour the guests assembled in the club room. Invocation was offered by Rev. M. L. Barnes, pastor of Ranlo Baptist church. An elaborate four course dinner followed, prepared and served by members of the Ranlo Wide-awake Girls' Club under the direction of Mrs. J. A. McFalls, Miss Mattie McFalls entertained during the dinner with musical selections at the victrola. Immediately after dinner, the host, Mr. McFalls, took occasion to thank each and everyone for their presence in response to his invitation and to also relate briefly the splendid progress the girls' club had made since organization six years ago. A most encouraging revelation brought out in Mr. McFalls' talk was the fact that the employees of his mill are contributing liberally and generously to the two local churches and their work. Rev. M. L. Barnes and R. L. Forbes, pastors of the two churches, were next introduced as speakers. Their talks were both pleasing and instructive, each praising the mill, its management, superintendent and employees for the support they have given their cause in a most gratifying way. Particular tribute was paid Mr. McFalls for the Christianly, brotherly spirit he endeavors to keep existing among the people of his community at all times. Others making short encouraging talks were Z. G. Holtzclaw, J. B. Reeves, C. H. Ross, S. A. Robinson, W. T. Love and Prof. A. C. Warlick, superintendent of Ranlo schools.

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Spinners Meeting in Raleigh

(Continued from Page 14)

cotton. You cannot take Western 1-inch cotton with a heavy body and take 1-inch cotton graded at Inman, for it has not the body that Western cotton has, and set it with the same results as Western cotton.

THE CHAIRMAN: What we are after is establishing as near a standard as possible. We know your conditions and the other man's will vary to some extent, but if the other man has some idea he can work to or from that idea and get results. In other words, neither you nor I can tell a man something that will overcome exactly the trouble he is having. If so, it would be a miracle, but I can give him an idea to work from and that is what we are after.

MR. McCOMBS: A little experience I had in the last 90 days. I am using heavy bodied Western cotton and just previous to that I was using inch cotton. I ran my rolls close on that inch cotton, as close as Mr. Reynolds said. This heavy bodied came in and on account of the cockled yarn I had to open one inch. They said at New Orleans it was inch cotton and my cotton is not over one inch but set 1-16 open today, where for four to six months they have been closed. The body and character of the cotton is the thing that did it, also the humidity of the room does it. I know a mill using some cotton in a certain portion of North Carolina that runs rolls closed on the same cotton that I am using today in the eastern part of North Carolina, but I cannot run mine close. One mill can run close in certain sections of the country and another cannot. Humidity has something to do with it.

MR. GILBERT: If you would pull the staple under the same conditions as he was spinning it, he would be able to set the rolls a relative distance apart, but the point we want to get is the general opinion as to what the rolls should be set, two rolls of spinning. Is "A" the distance? Here is 90 per cent inch cotton. The point Mr. Haddock brought out about this distance from here to here—the longest cotton is here. Is "A" the distance that a roller should be set or should it be further apart?

MR. HADDOCK: I do know if you cut that beyond "A" the more you widen that space the more harm it does you after you pass 1-32 of an inch. If you add anything to that, 1-32 of an inch is ample.

MR. REYNOLDS: I spoke of the close settings of the rolls and I am speaking of what I started out with. I know with heavy body Western cotton we will get cockled yarn provided we have not set our rollers properly in the preceding process.

MR. DILLING: Ask Mr. Reynolds for something definite, what he means by "as close as can be."

MR. REYNOLDS: I gave you that, as close as will go and run.

MR. DILLING: What will you start with?

A MEMBER 1-16 of an inch.

THE CHAIRMAN: The question was asked here, I think that is clear

though, do you mean as close as possible mechanically or so far as the staple of the cotton is concerned.

MR. REYNOLDS: For a concrete example, on Whittin frames, as close as possible mechanically.

A MEMBER: Even if the cotton is one inch, the machinery will have a lot to do with cutting rolls. If you go to the actual mechanical setting of the frame you might have $1\frac{1}{4}$ or $1\frac{1}{2}$. You have to set the rollers according to the condition of the machinery to get the best results.

MR. GILBERT: All machinery, except spinning, gives trouble in setting too far apart as you cannot get it as close as it should be anyway. With cotton that we are able to get in this section of the country.

THE CHAIRMAN: Don't you think the consensus of opinion is if you stay as close as you can to avoid cockled yarn, that is would be the best setting. All that agree to that hold up their hands.

MR. GILBERT: Don't forget it will come a little closer after you think it is going to cockle.

THE CHAIRMAN: I think we might settle that as close as we can without cockled yarn. If you have cockled yarn you can open.

MR. DILLING: I would like to ask Prof. Nelson to give something on the question he raised a while ago whether it was better to gin cotton immediately after picking or let it stand in the seed for a period of time so that it would be more or less oil from the seed getting in the fibre. I am interested and would like to get whatever information we can.

PROF. NELSON: It is a question whether cotton will absorb the oil from the seed if this cotton were stored instead of being ginned at once. That is not a new question at all. I remember when I first came to Raleigh, Mr. Morrey was President of the Caraleigh Mills and he asked me "Don't you think it would do cotton good in running it if we would put back the cotton seed oil in the cotton." He said he really believed we could do that. I am not raising the question of oil on cotton, but it is really a question of whether if you could store the cotton it wouldn't be better to store it and gin later. It is almost impractical to do that. I might say it is impractical, for you would need tremendous storehouses. Such tests as those are really worth while and if any of you men want to discuss that we can refer it to Dr. Winters. They are making some of those tests on the college farm. They are growing cotton of various lengths and making tests along the line of ginning cotton as picked and storing and ginning it and keeping some of it longer and then ginning that. We expect to make those tests in our textile school. I do not think any of you right near the cotton fields have tried that, but if you have big warehouses it might be well for you to do that. The only test is to try it. You can talk about it as much as you want to. I believe that the cotton will absorb a certain amount of oil from that seed if you will store it, but I am not so sure you could find so much room to store all the cotton you picked. The biggest thing about ginning cotton is not storing it but the biggest thing is to watch out for the fibres and mixing at the gin. If you look after

that you will find better cotton to run through your gin. That is one thing that cotton manufacturers should get together with the big farmers, big cotton producers and see that cotton is ginned correctly, and is baled correctly and not mixed in the ginning getting ready also for your half and half,—some of you know what that is.

MR. BLACK: To get away from our discussion on staple cotton, it seems like we have arrived at something and still haven't decided on it definitely, but to keep the discussion going we have a condition in our mill that appears from time to time which I do not know if anybody else has it. I ran up with one man who had it occasionally. It appears early in the morning, especially in the fall of the year or winter, for about two doffs on a certain section of the frame. If you will hold up the bobbin you will notice a kind of black spray, black oil. We do not know what it is. If you keep your hands off it, it is not noticeable, but if you touch it it smuts the yarn. After you run a couple of doffs and it gets warmer the condition disappears. We did this, that and the other, but we have not been able to remedy it.

THE CHAIRMAN: Has anyone else had experience with that trouble, Mr. McCombs, have you had any?

A MEMBER: Have you had that tested to see if it was oil?

MR. BLACK: It looks like it.

A MEMBER: I have had smoke come in the mill from trains and cars passing.

MR. BLACK: We have it only on one side of the mill. Some of us thought it was letting down of the steam and that possibly it dampened the yarn and that the oil came from the bands. We tried that but it did not seem to be the cause.

A MEMBER: I had the same experience and came near losing my job on account of it, so I went to work to study it. My boss said I had to stop it. I looked for everything I knew. As Mr. Black says, it only comes occasionally. I tried to make out it was a different kind of oil, so we changed the oil and bought from another company. It still came on, so I decided my spindle was running too fast and caused the oil to come out. After I brushed it, it is mostly on fine yarn, the rack set so low at the bottom that it causes that. You have to keep it cleaner than usual because the traverse causes that.

THE CHAIRMAN: Mr. Hill, he has given your experience?

MR. HILL: Yes.

A MEMBER: I have seen the same trouble in Brookside Mill due to sediment from coal from the railroad. It is in the atmosphere. I think that Mr. Black gets part of the smoke and humidity in one part of his mill. It is closed on one side.

MR. JONES: I have run into that same trouble and it is caused by the switch track that runs by the mill. We have that for one or two and then it will disappear.

MR. BLACK: It would only bother the first two doffs early in the morning that came off the frame and trains passing there all day long, it looks as if it would cause it all day.

MR. JONES: Humidity would cause that to happen in the morning.

THE CHAIRMAN: Has anybody a system for vacuum cleaning in the

mill. If so, hold up your hands. (No hands are help up.) Does anybody know anything about it? We have had inquiries as to the value of it.

A MEMBER: I tried it but did not have good results. It will do some things but others it will not. It would choke up on us.

THE CHAIRMAN: Is there any other subject that anyone would like to discuss?

A MEMBER: I would like some of the gentlemen to discuss 20's, 2-ply, 7 inch traverse and 2 inch ring run at 140 on front row.

THE CHAIRMAN: You were talking about spinning 20's?

A MEMBER: Yes, I want to know what they think about it.

THE CHAIRMAN: There are 45 men spinning 20's. Let's get some information on it. Mr. Phillips, what spindle speed do you use?

MR. PHILLIPS: Around 8,000; that is 20's, 4 hank roving, double, about 330 times square twist.

THE CHAIRMAN: You have reference to the spinning, I understand?

MEMBER: Yes, 2-ply yarn, supposed to be standard warp twist.

A MEMBER: I have not the layout that he mentions. I use 4-hank roving, about 8000; front roller, 136; back, 140. I use $4\frac{1}{2}$ twist multiple.

THE CHAIRMAN: What is your front roll speed?

MR. PHILLIPS: I do not know exactly, but I think 146.

MR. McCOMBS: We run 20's in our No. 1 mill 8300, hank roving 3.30 460 twist multiple, front roll speed 142.

THE CHAIRMAN: What is the revolutions of your cylinder whir?

MR. McCOMBS: I think that is 7775 with 8 inch whirl.

MR. HILL: Our 20's, about 145 revolutions, front roll, 7900 spindle speed, 3.75 hank roving, 3.50 multiple.

MR. BLACK: 7800 spindle speed, 4 hank roving, 3.36 multiple, front roller speed 144.

THE CHAIRMAN: The standard multiple is what?

A MEMBER: 4.75.

MR. LOCKEY: While we are on 20's, I would like some of the members running No. 20 to discuss the proper or improper distribution of twist and the cause and remedies for same.

THE CHAIRMAN: In what relation?

MR. LOCKEY: I want to know the proper organization on 20's yarn. I want to find out from a practical man in the house, spinners who have been running 20s 2-ply yarn, if it is practical to run 20s 2-ply on $\frac{3}{4}$ traverse with 2 inch ring at the speed I mentioned, 142, with 3.25 hank roving. Our spindle speed is 8500, 3.25 hank roving, double creel. We are making 142 with 4.70 twist multiple.

THE CHAIRMAN: He wants to know if it is practical to run 20's 8500 spindle speed, $\frac{3}{4}$ traverse and 2 inch ring. Speed 142, standard 4.70 to the square root.

MR. DILLING: That looks as if it was a low spindle speed for front roller speed. I think it is the extreme for speed that he is on. I think that 2 inch ring and $\frac{3}{4}$ traverse 8,500 revolutions spindle and 1.42 for roller and draft of 13, I think is the extreme on all. If he is doing

(Continued on Page 20)

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Spinners Meeting in Raleigh

(Continued from Page 18)

it he is getting by with a good piece of work but it is extreme.

THE CHAIRMAN: What gauge is that, 2½?

MR. LOCKEY: Yes.

MR. DILLING: That is a mighty close shave too. If he is doing that, he ought to congratulate himself.

MR. LOCKEY: I believe it is 3 inch gauge.

MR. DILLING: You have only 1 inch space. You are getting by with a good piece of work. I don't think it is practical to make high quality yarn under those conditions.

MR. REYNOLDS: I think Mr. Dilling is exactly right. He has the extreme condition on everything in his mill. When the weather is bad the work runs bad. He would have to change his mill to change that.

MR. LOCKEY: I am very glad one man came to my rescue.

THE CHAIRMAN: Mr. Jennings, will you give us your lay-out on 20's?

MR. JENNINGS: My lay-out is not practical. I don't approve of it. I make that from a single roving, 2.56 hank, spindle speed 8,300, 4.70 twist multiple, front roll speed 124.

THE CHAIRMAN: I think that is good.

At the request of the Chairman, the men who are running 20's called out their spindle speed as follows: 7,900, 8,200, 8,500, 8,300, 8,000, 7,200, 8,000.

THE CHAIRMAN: I wish to discuss a very interesting subject. The Georgia meeting discusses the angle of the roll stand. Robert Phillip was at that meeting and we would like to hear from him and from you all then.

ROBERT PHILLIP: This was a married man named Phillips that did it, not I. His idea was that on the usual spinning there is an angle of 25 degrees and he said it took him three months to induce the machinery manufacturers of his new equipment to elevate the angle to 35 degrees, the theory being that it brought the front roll nearer to the thread guide roll. He said that he raised the spinning frame by putting blocks under the frame a little bit. I don't know the difference that would make. I forget what he said that did for him, but I believe it took out some twist. That is his side of it. I was talking to another fellow who had the opposite opinion. He said that on the set of rolls we will say, for example, that were 3 or 3¼ inches long, if you elevate one end by 5 degrees, which is what that man did it won't make much difference in that length; if you had something 10 feet long elevated one end or lowered one end 5 degrees by the time you got to it, put it further than it did in that space. This man at Social Circle, raised his frame 4 inches to take care of the difference in the height of the rolls. I am giving you both sides of it because I didn't have anything to do with it. He got the machinery manufacturers to increase the angle of the spinning roll from 25 to 35 degrees and is trying to get them to get him some frames with 35 degrees angle. His idea is to approach perpendicular condition of his roll; naturally it wouldn't go to perpendicular or

vertical but approach more nearly vertical than in the average spinning roll.

A MEMBER: Will you kindly draw that, Mr. Phillip?

MR. PHILLIP: If this represents 25 degrees angle, what he did was to raise those rolls in back there or let them down in front so that they set at 35 degrees angle. In other words, cotton going through 25 degrees was simply raised to go 35 degrees.

THE CHAIRMAN: Take that average condition, 25 degrees, the yarn goes out here and gets to his guide and then down. Now, what he has done is to bring this up and out so that it will come out of the roll here and down.

MR. PHILLIP: Yes, and won't drag over his steel roller there.

THE CHAIRMAN: All he did was to increase the inclination of the rolls 10 degrees. That does not pull the yarn down quite as hard on your front steel roll. That it all he accomplished. As a matter of raising the frame 4 inches, this difference between 25 and 35 would not amount to ¼ on an inch.

MR. CLARK: I talked to W. L. Phillips about the change. In his mill he had some old frames. It has been a good many years ago since they were put in but they had 35 degree angle and he found those frames were doing just as good work as his new frames; at least, he claimed that and he bought a few new frames—he had 35 degrees put on the stand and had them moved forward so as the yarn came out it came straight down to the guide wire and then down. When he did that the angle being tilted, he raised his frame 4 inches off the floor with blocks in order for the spinners to do the work and found he could do just as well. He has been able to get 10 revolutions more speed and much better spinning. He has changed the other comparatively new frames by putting on new roll stands, and moving further to the front so when the yarn comes through it would come nearer a straight line.

MR. McCOMBS: One advantage using the 35 degree angle is that twist is more evenly distributed. I happen to know the man who put this in for Mr. Phillips. He lives in Burlington and works for the Saco-owell company and during his time at home he told me about this.

MR. DILLING: Further regarding the raising of the frames, I know that is the reason that Mr. Phillips raised them. We will also find that a good number of our older frames are lower than is best for the conditions that we have today. Years ago when we had smaller children working the mills than we have today, the machinery men built so the frames would be lower, but now they are building higher and the conditions are such that higher frames are better for us. In fact, I have raised frames put in 2½ years ago off the floor, new frames built at that time. I did not raise 4 inches, but raised some, and found it of advantage.

PETER QUINN: have been down to that Social Circle Mill and on those frames that he changed, he changed from 25 to 35 degrees and the new ones have been made the same way. The big advantage is that

he has more speed. He can run with less strain and it distributes the twist better. Take a 25 degree roll stand and it is impossible to take twist out. You cannot run the filling on that with much twist out and run good. Instead of running 3.50 you have to run 4.75. I know two or three mills that have trouble and have had to change the roll stand on filling so as to take the twist out. It is good on both filling frames and on warp. He has changed all except four frames. Those are a different make and he is going to change them. If he puts speed on those four frames that have 25 degrees it would tear them to pieces. If he changes to 35 degrees he will have no trouble.

THE CHAIRMAN: It looks plausible.

MR. REYNOLDS: When I was younger I ran 25 frames with 35 degree angle. On 35 degree frames we could run 10 to 15 degrees faster and make better yarn and there was only one objection to it which was that the top roller hangs so much higher to the center that we had trouble keeping it oiled so that the saddle would not cut into the roller bars. You will find that the roll wears out much quicker bottom and top than the 25 degree angle. That is the only objection.

THE CHAIRMAN: That is reasonable.

MR. QUINN: If you get the proper degree saddle and stirrup you won't have trouble.

A MEMBER: We have one frame spinning on which we raised the stand up 2 inches and 1½ inches, making a difference of about 8 degrees, and we find it would run so much better that way. Increased the front roll eight revolutions per minute and it runs just as well and I find we can run a heavier traveler on it and get more yarn on the bobbin and get a little more twist in the yarn doing that and it will run just as well.

THE CHAIRMAN: Has anybody else a degree stand or have they decreased the angle of the stand any?

A MEMBER: How about the saddle, Mr. Quinn?

MR. QUINN: You have to get the right saddle for the degree of your roll. If you have 25 degrees you cannot use the same saddle as 35 for it will rub. If you put the 25 degree saddle, on 35 degree rolls it will get you in trouble. I know that. It was the saddle and stirrup that causes all the trouble but when you fix that it will be all right. It must be made for the degree you have.

MR. REYNOLDS: When you change degree how much weight does it add to front roller?

MR. REYNOLDS: Just a little bit of weight.

MR. REYNOLDS: How about the friction on those rolls and the bearings on the steel roll; won't that be increased?

A MEMBER: It increase the friction 10 per cent.

MR. DILLING: I can see how that would happen on the top but how can it on the front rolls?

MR. QUINN: It makes more weight on the front roll, the steel roll. It gives more weight. It will wear out a whole lot quicker. If you run your roll faster it would wear out.

THE CHAIRMAN: Would you say increased speed or weight?

MR. QUINN: It is the increased weight.

THE CHAIRMAN: You are just changing the position of your weight?

MR. CLARK: You have the same amount of weight.

MR. REYNOLDS: If you have two men out there or three and one man gets under the bottom, he will have more weight than if they were all lying side by side. The nearer the front row comes under the bottom the more weight on it.

MR. DILLING: Mr. Quinn, does it add more to the weight or wear out more if you have your stirrup and proportioned?

MR. QUINN: The extra speed is what wears it out.

MR. CLARK: The rolls are still in their same bearing?

MR. HADDOCK: You have still the same amount of weight on the bearings. You just transfer the wearing from one position to another.

MR. PHILLIP: Yes, wear it out in a different place.

MR. CLARK: The representative of the Society of Mechanical Engineers says that I am right. It does not make any difference in the weight.

A MEMBER: If they change the stand to 35 degrees wouldn't they change the bearing in there to counteract? Why not cut the stand down?

A MEMBER: That bearing is designed for 25 degrees and if you use on 35 degrees it will wear faster due to shifting of load toward the forward edge but you can easily enough change the bearing to obviate that. The trouble is you are trying to take equipment designed for 25 and use for 35 degree. If you are going to use 35 it should be designed all the way through.

THE CHAIRMAN: If that is designed properly all the way through, what is your opinion of it. Of stands and saddler and all?

MR. QUINN: The 35 wears out quicker. I think it is due to speed.

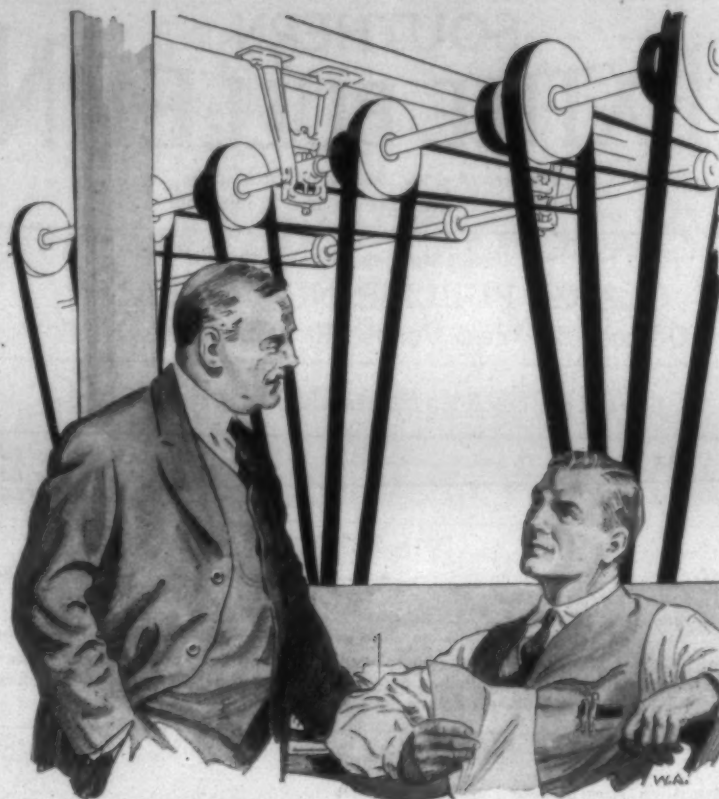
An adjournment was taken for lunch.

Afternoon Session.

THE CHAIRMAN: I am passing out some slips of paper and I would like you to put down the following information as nearly as you can: the number of yarn, the grade of cotton, the spindle speed, hank roving, whether double or single roving in spinning and twist multiple that you are using. We want to get this information, and compile it. Also add whether warp yarn or hosiery yarns you are making. I would appreciate it very much if you would give us that information on as many numbers of yarn as you can, and our idea is not to tell you how to run your mill, but to determine roving stands. For example, if you can show me a mill anywhere around here that is running roving with standard twist, I would like to know it. That will give us some idea to work from, and we will gradually collect more information and it will be worth something eventually.

ROBERT PHILLIP: It is a pretty

(Continued on Page 26)



"By the way Joe, how is it we don't have any more overtime in Department B?"

"Just another kink ironed out, chief. Department B only worked overtime when machines got behind and held up the works.

"We checked up and found Graton & Knight had a belt that was standardized for putting speed in these machines and keeping it there. We're using that belt now and getting the stuff through 20 per cent faster. It's been a life-saver to Department B, all right."

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SOUTHERN TEXTILE BULLETIN

Member of Audit Bureau of Circulations
Member of Associated Business Papers, Inc.

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The Raleigh Meeting

THE meeting of the Spinners' Division of the Southern Textile Association at Raleigh last Friday was not largely attended, but as has been the case with many of the small meetings, was very interesting.

The object of placing the meeting at Raleigh was to give an opportunity for the superintendents and overseers in eastern North Carolina to attend and to get their ideas upon spinning room problems.

Experience has shown that men in different sections of the South have different ideas and it is of much value to get the different viewpoints.

At the Raleigh meeting it developed that very few mills were running filling wind on warp and yet their indicated front roll speeds were equal if not higher than those of other sections.

The most interesting discussion, during the meeting, was upon the question of the advantages to be derived from changing the angle and the position of the spinning rolls.

W. L. Phillips, superintendent of the Social Circle Cotton Mills, at Social Circle, Ga., has been a pioneer in making such changes and the industry is much interested in the results he has obtained.

One, well worth while, idea advanced during the meeting was the raising of the spinning frames. It is well known that many of our spinning frames were built and installed when much younger children worked in the mills as spinners and doffers.

Now every one under 14 has been eliminated and under the encouragement of the mills the children

above 14 are staying in school to a far greater extent than formerly.

Almost without realizing the fact, the mills have reached the point that they are using much older boys and girls on spinning frames designed and intended for smaller people.

Under such a condition it is both uneconomical and unfair to cause the spinners and doffers to do more stooping than would be necessary if the frames were raised.

It would be an easy matter and comparatively inexpensive to have some four-inch iron blocks cast and to insert them with bolts under the corners and the sampsons of the spinning frames.

Mills that have recently made the experiment report much increase efficiency and ease of work and we suggest that mills at least experiment with a few frames.

The operatives are entitled to have their work made as easy as possible and it is a severe strain upon a girl's back to have to continually bend over more than is necessary.

The Raleigh meeting was a success and will do much good.

Our Fifteenth Anniversary Number

ON Thursday, March 4th, we will issue a very important number, which will be a combination of our Annual Review and our Fifteenth Anniversary Number.

It will not only contain Clark's Annual Spindle Increase List, Spindles on Order List, Knitting Machine Increase List, and the other features which have made our Annual Review Numbers attract so much attention, but there will be

a very comprehensive survey of the past fifteen years in the textile industry of the South.

We will show the spindle, loom and knitting machine increase by States and will also show the growth of individual mills and give a list of men who have remained with the industry during the fifteen-year period.

We began publication on March 2, 1911, and will review not only the textile industry, but our own career during this period.

We intend to make our Fifteenth Anniversary and Annual Review Number so interesting that it will be preserved by a majority of our subscribers.

The Anvil Chorus Begins

IN opposing the proposed studies of the textile industry by a Meddling Department of the University of North Carolina, we called attention to the fact that our enemies would depreciate all favorable findings upon the ground that they were made by our own people and would magnify all unfavorable findings upon the same grounds.

The report of the alleged investigation of the mentality of two mill villages was made the basis of a theses by Dr. John H. Cook, of the N. C. State Normal College, while taking special work at Columbia, and the Anvil Chorus has begun with the following editorial in "Christian Century":

RECOMMENDS END OF COTTON MILL SCHOOLS

Dr. John H. Cook, a Southern educator of repute, has made a study of the cotton mill schools of North Carolina. His report shows that the mill school is uniformly inferior to the public school. There are 119 of these schools in North Carolina, with an enrollment of 36,222 pupils. The average educational opportunity offered by the State in town school of comparable location is eleven grades; in mill schools only seven grades. Intelligence tests show that the mill school children fall below those in public schools. In Greensboro, Rev. Harold P. Marley is leading a campaign to have the mill schools in the suburbs of that city transferred into the city school system. Usually they are so included where the mills are within a municipal area, but in Greensboro the Cone Mills are exempted from the rule. The seven grade system in the mill schools is not without method. A child beginning at six completes the course at fourteen—just when the State law allows him to go to work. Dr. Cook found that the thirteen year olds quite generally failed to attend. With education ending and work beginning at the end of that year, there is much carelessness in securing attendance on the part of both parents and school authorities. The compulsory attendance law provides for eight years' schooling, but when mill owners run the schools the enforcement officers wink at this requirement. Dr. Cook recommends that all schools be put under State control, and the privately supported mill school abolished. Since time began paternalism has worked best for the paternalist.

The University investigators hedged their report with the statement that only two communities were investigated and that the results were not conclusive but neither Dr. Cook nor the Christian Century cared to mention that fact and the textile industry of North Carolina will be slandered and reviled

all over this country and those who abuse us will give as their authority a brief half baked investigation made by inexperience and probably incompetent University instructors. Bitter attacks, inspired doubtless by those whose plan we thwarted, have been made upon us but we are more and more convinced that our position is reasonable and sound.

\$10 For a Directory

WE find that we have no copy of the January 1, 1912, issue of Clark's Directory of Southern Textile Mills, and will pay \$10 for the first copy of same sent to us.

It was the first issue of Clark's Directory, and we assume that a copy of same can be found in some mill office or superintendent's desk.

We also find that we have no copies of the following editions, and will pay \$5 for the first copy, of any of the editions named, that reaches us:

July 1, 1912.
July 1, 1913.
January 1, 1914.
July 1, 1914.
January 1, 1915.
July 1, 1915.
January 1, 1916.
July 1, 1916.
January 1, 1917.
January 1, 1919.
January 1, 1922.

We knew that the demand for Clark's Directory of Southern Textile Mills had been so great that we had completely sold out almost every edition since we began publication, but did not realize that we had not kept any copies of the editions named.

We would like very much to secure copies of the issues named above, and especially desire a copy of our first issue of January 1, 1912.

Tattersall Predicts Prosperity

TATTERSALL, the well known English textile authority, says:

Lanchashire is still supreme as a manufacturer of cotton goods. In view of the depression having lasted five years, a swing of the pendulum is overdue and most people will be very disappointed if 1926 is not a more encouraging year than any twelve months since 1920.

Cotton Goods Position Stronger

THE buyers of cotton goods have been trying to make it appear that the position of cotton goods was weaker, but the following statement from the weekly letter of the Hunter Manufacturing and Commission Company refutes their contention:

It is a fact that the condition of print cloths and sheetings in general is stronger than it was a month ago. Print cloths are sold at least as many weeks ahead as they were at the time and many of the sheetings are sold further ahead than then. In spite of the comparative quiet, present production of grey goods in general is apparently being fully disposed of. Print cloth prices are practically the same as a month ago; sheeting prices slightly better.

Personal News

W. C. Eason has resigned as night superintendent of the Lenoir (N. C.) Cotton Mills.

A. Y. Kelly has resigned as Division Manager of the Consolidated Textile Corporation at Raleigh, N. C.

D. A. Long has been elected secretary of the Amazon Mills, Thomasville, N. C.

Thomas B. Rector, of Greer, S. C., has accepted a position with the Adams Duck Mill, Macon, Ga.

L. E. Pritchard has been promoted to second hand in No. 1 carding at the Rhodhiss Mills, Rhodhiss, N. C.

D. R. Fry has accepted the position of overseer of spinning at the Blackburg Mills, Blackburg, S. C.

H. S. Miller has become overseer of dyeing at the Statesville Cotton Mills, Statesville, N. C.

ed in New York, has accepted a position with the Durham Cotton Manufacturing Company Durham, N. C.

George F. Becknell, from the Art Cloth Mills, Lowell, N. C., has accepted a position with the Waldensian Weavers, Inc., Valdese, N. C.

Chas. Adkins has returned to his former position as night superintendent of the Lenoir (N. C.) Cotton Mills.

G. B. Byrd has resigned as superintendent of the Pilot Mill of the Consolidated Textile Corporation, Raleigh, N. C.

R. R. Stovall has become overseer finishing and shipping at the Pilot plant of the Consolidated Textile Corporation, Raleigh, N. C.

S. M. Sloan has been promoted to secretary and treasurer of the Waldensian Weavers, Inc., Valdese, N. C.

O. R. Billings, formerly of the Dan River Mills, Danville, Va., has become night overseer of weaving at the Veritas Silk Mills, Charlotte.

P. B. Mitchell, of Bessemer City, N. C., has accepted the position of overseer of weaving at the Joanna Cotton Mills, Goldville, S. C.

William Toll, assistant secretary of the Sipp Machine Company, Paterson, N. J., has been on a visit to the Southern territory with G. G. Slaughter, Southern representative.

S. R. Kennett, formerly overseer of weaving at the Manville-Jenckes Company, High Shoals, N. C., has accepted a similar position with the Borden Mills, Kingsport, Tenn.

E. M. Smith, who recently resigned as overseer dyeing at the Statesville Cotton Mills, Statesville, N. C., to accept a position with the Hickory Spinning Company, Hickory, N. C., was tendered a dinner by officials of the mills in appreciation of his services.

J. O. Jenkins has accepted the position of night superintendent of Clinton Cotton Mills, Clinton, S. C. Ernest Nelson, who has been locat-

Fred H. Learned, sales manager of Stowe and Woodward, New Upper Falls, Mass., has been visiting a number of the mills in the Piedmont section.

G. C. Sutton has been promoted from overseer twisting, warping, spooling and winding to overseer spinning at the Edenton Cotton Mills, Edenton, N. C.

Clarence Cates has been promoted from second hand to overseer of twisting, warping, spooling and winding at the Edenton Cotton Mills, Edenton, N. C.

Ruth Henderson, daughter of T. H. Henderson, superintendent of the Clinchfield Mills, Marion, N. C., has been taken to John Hopkins Hospital, Baltimore, for a serious operation.

W. F. Barrier, who recently resigned as overseer of weaving at the Iverness Mills, Winston-Salem, N. C., has accepted a position with the Hoosier Cotton Mills, Cannelton, Ind.

J. P. Inglett, who for several years was overseer of carding at the Buck Creek Cotton Mill, Siluria, Ala., has accepted a similar position with the Bradley Manufacturing Company, Columbus, Ga.

N. A. Gregg has resigned as superintendent of the Elmira Cotton Mills and Stevens Manufacturing Company, Burlington, N. C., to accept a similar position with the Stonecutter Mills, Spindale, N. C.

R. S. Maness has resigned as night overseer weaving at the Monarch Mills, Lockhart, S. C., to become assistant overseer at the Glenn-Lowry plant of the Aragon-Baldwin Mills, Whitmire, S. C.

T. A. Wright has resigned as superintendent of the Nelson Cotton Mills and Whitnel Cotton Mills at Whitnel, N. C., to accept a similar position with the Monroe (N. C.) Cotton Mills.

T. B. Spencer, division manager in charge of the Ossipee and Hopedale Mills of the Consolidated Textile Corporation at Burlington, N. C., has also become manager of the Pilot Mills at Raleigh, N. C.

C. E. Hall has been transferred from superintendent of the Hopedale Mill of the Consolidated Textile Corporation at Burlington, N. C., to a similar position with their Pilot Mill at Raleigh, N. C.

B. H. Burnette has resigned as overseer of cloth room at the Greer plant of the Victor-Monaghan Company Greer, S. C., and accepted a similar position at the Buffalo plant of the Union-Buffalo Mills, Buffalo, S. C.

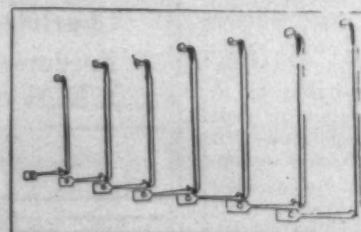
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MILL NEWS ITEMS OF INTEREST

Charlotte, N. C.—The Stuart Mills have purchased silk winding equipment made by the Sipp Machine Company, Paterson, N. J.

Rhodhiss, N. C.—The Rhodhiss Mills are installing 348 looms made by the Hopedale Manufacturing Company, and are changing the production from sheetings and drills to print cloths.

Newton, N. C.—The Warlick Manufacturing Company, recently organized here, as noted, to build a fine goods mill, has placed orders for rayon winders. The equipment was purchased through G. G. Slaughter, Southern agent for the Sipp Machine Company, Paterson, N. J.

Ranlo, N. C.—At the annual meeting of the Rex Spinning Company, J. H. Mayes, of Charlotte, was re-elected president and treasurer, Carl A. Rudisill, of Cherryville, was elected vice-president and general manager and will have charge of the operation of the plant.

Johnson City, Tenn.—"Bemberg, Tenn." is a new station stop, which will appear on the next railroad map and timetables of the East Tennessee & Western North Carolina Railway. The new station is named for the American-Bemberg Corp., which is now building the first unit of its synthetic fiber plant near Johnson City.

According to an official of the railway, the station, which is at the plant will care for as much passenger traffic as the station in any town of 2,500 population on the line.

Elberton, Ga.—Formal organization of the Elberton Cotton Mills, which recently purchased the Hamilton Carhartt Mills No. 3 here, will be completed within a short time, when officers and directors will be elected. The mill was purchased by F. W. Van Ness and a number of local business men will be associated with him. Superintendents and overseers have been engaged and as soon as the work of overhauling the mill is completed, it will begin regular operation.

Mount Holly, N. C.—The yarn processing plant of the American Yarn and Processing Company, will have a weekly capacity of about 200,000 pounds of yarn when the enlargement under way is completed. The work under way includes the installation of a new boiler, an evaporator system for reclaiming used caustic, a new mercerizing range, new splitting machines, quilling frames, winding frames and a conditioning room for finished yarn. The splitting frames were manufactured by the Cocker Machine and Foundry Company, Gastonia, N. C.

In addition to the new machinery, other improvements include the laying of a new water line to the river and the construction of a new warehouse.

Laurens, S. C.—The contract for the electrification of the Laurens Cotton Mills, has been let by the architects, and actual work will start some time during the summer. The Walker Electric & Plumbing Co., of Atlanta, was awarded the contract for the wiring and installation, at a figure reported to be around \$33,000. The Allis-Chalmers Co., of Milwaukee, was awarded the contract for motors. The electrification of the plant will not interfere with the work there, it is stated. With the completion of the work electricity will be used to replace the steam plant, which has been in operation for some time, at the Laurens Mill.

Dallas, Texas.—Officers of the C. R. Miller Manufacturing Company were reelected at a meeting of directors last Saturday at the offices of the company, 622 Sante Fe Building. They are: C. R. Miller, president; T. F. Bush, vice-president; A. Culberson, vice-president, H. S. Clarke, vice-president, and F. S. MacCurdy, secretary-treasurer.

Directors elected by the stockholders include the officers and the following: G. H. Connell, R. W. Higginbotham, Allan D. Sanford, Bryon Miller, E. B. Miller, F. A. Pyke, Sam G. Giles, E. R. Nash, Jr., F. D. Perkins, J. H. Ferguson, F. B. Pope, A. M. Scott and C. B. McCauley.

Charlotte, N. C.—E. W. Sweet and associates, who operate the Southern Dyeing Company, Burlington, N. C., are considering plans for locating a dyeing plant in this city.

Gastonia, N. C.—The Valley Waste Mills, owned by the Hillside Cotton Mills of LaGrange, Ga., have leased warehouse space at Broad street and Long avenue here for warehousing cotton and cotton waste. Offices of the Valley Waste Mills are established in the newly leased property.

Galveston, Texas.—Decision on awarding the contract for the building and plant of the Galvez Cotton Mill is expected soon, it has been announced. Directors of the mill have been working for several days on the tabulation of bids and are very near a decision on the contract award. Rudy Copeland, vice-president, is expected to confer with directors on the final award.

Burlington, N. C.—The Rodwell Garment Company, owned by P. C. Rodwell, and formerly operated at Orangeburg, S. C., has been moved here. Mr. Rodwell will be active head of the business. He will manufacture shirts, athletic underwear and sleeping garments. The company will be incorporated and will begin manufacture with 55 machines, employing 75 women.

Old Fort, N. C.—It is expected that construction work on the new bleachery to be built here by the Joseph Bancroft and Sons, Wilmington, Del., will be started within a short time. The company has purchased 650 acres of land just east of this town.

The Bancroft interests announced last year that they were making preparations to build a Southern plant in this section, but have not yet stated when actual work will be started.

Atlanta, Ga.—The annual meeting of the stockholders and directors of the Lullwater Manufacturing Company, cotton clothing and shirts, was held recently in the office of Asa G. Chandler, Jr., vice-president of the company.

Results for the last year, according to Walter T. Chandler, president were very gratifying, as the records show an increase in volume of business of 100 per cent in 1925 over the previous year. It was decided by the directors to use the same operating system during 1926, except on a much larger scale, as the plans again are to double production during the coming year.

Because of the recent business, the official staff voted to create another office of vice-president, which was filled by the election of Edgar Dunlap. The following officers were reelected: Walter T. Chandler, president and treasurer; Asa G. Chandler, Jr., vice-president; C. S. Adams, secretary.

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Thomasville, N. C.—At an annual meeting of the stockholders of the Amazon Cotton Mills just held the following officers were elected for the new year: C. G. Hill, president, C. A. Cannon, of Concord, vice-president, R. C. Rapp, treasurer and D. A. Long, Jr., secretary. This is a promotion for the two last named gentlemen.

Greenville, S. C.—Plans are being completed this week to begin the operations of the Piedmont Plush Mills, on the Easley Bridge road, at the intersection of Arlington avenue, about March 1, according to a statement by Fred W. Symmes. This mill when in operation will employ between 50 and 60 operatives. Mr. Symmes said the work had been delayed because the building was not completed on time. He said machinery is now being installed and this work should be finished by March 1.

Valdese, N. C.—The Waldensian Weavers, Inc., have started night work and are building 20 new homes to care for the additional employees. The company, which began operation last year recently increased their loom equipment and will soon have all the new looms in operation. This mill is considered one of the most modern weaving plants in the South. It is producing an unusually beautiful line of draperies of cotton and artificial silk and has found a ready sale for its product.

Spartanburg, S. C.—Completion of the cloth room, part of a \$200,000 improvement program, at the Arkwright Mills, will be effected within the next two weeks at a cost approximating \$20,000, according to an announcement made by officials of the Fiske-Carter Construction Company. The room measures 70 by 100 feet and will be equipped in the most modern manner, providing plenty of light, thus making the work of

employee much more ideal, it is understood.

The extensive improvement program, which is now underway, embraces a complete renovation of the plant, it is understood. All old looms are being replaced with new and the entire plant is being so lighted that no shadow will be thrown.

Additional to the mill, electric

lighted that no shadows will be out the mill village and in the homes of the employees.

The mills weave a heavy grade of durable cotton cloth, some of which is being used by Ford in the manufacture of automobile tops.

The company has a large contract with him and expects to continue the manufacture of this commodity for some time, it was announced.

Greensboro, N. C.—A step toward winding up the affairs of the Mecklenburg Mills company is indicated in papers filed here in the office of R. B. Blaylock, clerk of United States court, western district of North Carolina, when the way was cleared for foreclosing on the mill property.

The documents were answers to the petition of the Coal and Iron Bank, of New York, trustee for the bondholders. The bank lately petitioned Judge E. Yates Webb for an order for foreclosure of the property. The answers were made by E. F. McGowan, trustee in bankruptcy for the Mecklenburg Mills; John C. Lawson, who was secretary and treasurer of the mills company and T. C. Guthrie, of Charlotte, attorney for the receivers. The answers agree to foreclosure.

The Mecklenburg Mills company, which had headquarters at Salisbury, operated four cotton mills, the Mecklenburg at Charlotte, Newton and Clyde, and Nancy, at Tuckerton, Montgomery county. The mills were adjudged bankrupt in October 1923, and have not been operated since May 30, 1923, when officials of the mills admitted insolvency. J. D. Norwood, of Salisbury, was president of the company.

The Coal and Iron National bank held the bonds in amount of about \$600,000, in the interest of the owners of the bonds and the mills have really been in the hands of the bondholders. Deeds of trust on the properties were given by the mills company to secure the bondholders.

In one of the papers filed it was stated that the trustee in bankruptcy has not received any compensation, nor has attorney for him been paid anything.

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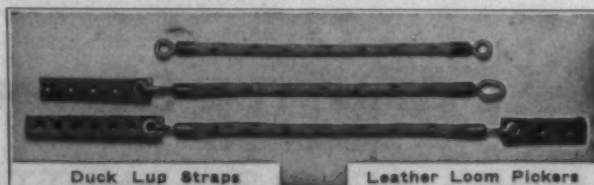
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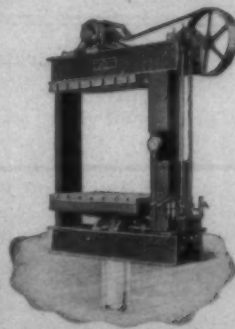
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Spinners Meeting in Raleigh

(Continued from Page 21)

long way from this section, but the Textile Operating Executives of Georgia, which is an organization similar to this in Georgia, will have a carding and spinning meeting at the Ansley Hotel in Atlanta March 9th. We will be very glad to have you, both mill men and salesmen, if you will come. It starts at 9:30 a. m. and will be over at 2:30 p. m. At this meeting we will cover carding and spinning, and will take up important subjects relating to both departments. If any of you can come, we will be glad to have you without further invitation from us.

THE CHAIRMAN: We want to hear from you men. You have problems facing you that I do not know anything about, and it would make it much more interesting if you would bring them up.

MR. GILBERT: We would like to hear from David Clark about long draft spinning.

MR. CLARK: I cannot tell you much about it except hearsay, as I have not seen long draft spinning. I understand that rolls are now being made in the South for it. Recently I took lunch in New York with one of the largest manufacturers of Alsace-Lorraine and an Italian manufacturer, and both of them laughed at the South and said it was ten years behind the times. They are

both running longer draft than we do. The man from Alsace-Lorraine had something like 400,000 spindles and he said all his yarns above 40s were made with long draft and he did not understand how the mill men of the South made it with short draft. That is about all I know about the long draft proposition.

THE CHAIRMAN: If there is nothing else you want to bring up, I will say that especially in South Carolina and lower down, the mills, a good many of them at least, in fact the majority, have adopted filling wind on warp spinning. I understand not many in this section have that, I may be mistaken, but I would like to ask how many men are running filling wind on warp spinning or yarns, to hold up hands.

(Hands are raised.) That is a good many. What advantages have you found?

MR. HADDOCK: I can hardly say as we have not gone into it as thoroughly as we could have. It is only recently that we have adopted it. About the biggest change is being able to get more yarn on the bobbin. Mr. Buchanan is one of our men where we recently made that change, and he can tell you a few more details than I can. My impression is that we get 13 per cent more yarn on the bobbins.

MR. BUCHANAN: The experience I had is that we increased our production for one thing, and then we can get through with a good deal lighter travelers on the same amount of twist than otherwise. We

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get more yarn on the bobbin and it should be better for weaving. Then it runs better. Most any way you look at it we get better results all through, yarn, running, production, and all.

THE CHAIRMAN: Mr. Buchanan, how about the bobbin? Did you change the bobbin?

MR. BUCHANAN: Yes, we have a 7-inch traverse and a bobbin that is uneven in size, larger at the top than it is at the bottom, and for that reason, using that kind of bobbin, it gives us a better start, at the bottom, and at the top it takes an amount of strain off where it would not have done if it was the same size all the way up.

THE CHAIRMAN: Have you a cone on that bobbin or is it a plain straight bobbin?

MR. BUCHANAN: A plain straight bobbin. We tried the cone on two or three bobbins and find that we get better results on the one I am speaking about than with the cone.

THE CHAIRMAN: How much did you increase that bobbin at the top?

MR. BUCHANAN: We did not increase the bobbin from the top. You mean from the other?

THE CHAIRMAN: No, from the size at the bottom.

MR. BUCHANAN: 1-16th or something like that.

THE CHAIRMAN: I notice that is being done in a good many cases, to try to relieve that strain.

MR. BUCHANAN: You can get through with less twist. I wouldn't want to change that.

THE CHAIRMAN: I do not remember whether you stated it or not, but how much increased production do you figure?

MR. BUCHANAN: About 15 or 20 per cent.

THE CHAIRMAN: How much increase in speed?

MR. BUCHANAN: We took our front roll speed, our standard speed, and, of course, took out our standard twist because we did not need it. Now we barely put in standard, a little under standard, and we get a better yarn with that than with the old with about a turn and a half under standard. We are running 23 1/4's to 23 1/2's and we put in about 2.35 or 2.38.

THE CHAIRMAN: Can somebody else give their experience? We changed ours over two years ago and we have 7-inch traverse with filling wind. We find it much better. We cut our waste half in two, that is, hard waste that we have been getting, and I cannot say about the speed because we did not change but one frame. We have been on the same speed, but we have saved our waste production one-half.

THE CHAIRMAN: You find the spinning as a whole runs better?

MR. CREECH: Yes.

MR. McCOMBS: Nobody has advocated filling wind for the past ten years more than myself. There is no question about increased production and advantage over warp wind all the way through, not that you can put more on the bobbin, but there is one question I want to throw out. I want these men to go back home and try it. If there is a man running 30s warps on filling

wind, hold up his hand. Take up 50s, 60s and 70s, when roving breaks down the end is coming down, but if there is a man running filling wind on warp regardless of how heavy traveler he can put on it, I want you to break down one strand of roving and see how long it will run. Take its place on your filling, wind spooler and see if it goes through flat down through the warpers and see if it goes through and report at the next meeting what you get out of it.

THE CHAIRMAN: Has anybody had that experience? Some of you have run filling wind and can give your experience on that. From my standpoint, I have found that condition.

MR. CREECH: Ours is 26s.

THE CHAIRMAN: I have had singlings go down. In other words, when your traverse is going down on the big part of the bobbin, I have had them stay up to the small part of the bobbin, but never had one but that did not break down when you got to the top of the traverse.

A MEMBER: How will it get through the spooler?

MR. McCOMBS: I went in a spinning room with filling wind on 30s. The superintendent said it would not run. I took 35 of his roving ends and broke them back. It ran from 6 inches to 2 1/4 yards on single. I put the ends up, carried the ends through his spoolers, I carried them down to the warper and out of the 35 ends there were 33 of the same that went straight through the warper. When a spinner puts a bobbin on, usually he cannot put the singling up on warp wind, because it breaks. On filling wind, you can put singlings up. I want to ask you gentlemen to go back home and find what you are talking about. (Laughter.) At the next meeting you can tell me.

THE CHAIRMAN: I do not think that is a fair test. Six naught traveler is entirely too light.

A MEMBER: What kind of traveler does he use when two rovings run in, and even if it goes through and stays up and goes through the spooler what kind of device does he have on warpers? He must have something we have not got.

MR. McCOMBS: 3x4 1/2 spool.

THE CHAIRMAN: Has anybody else had experience along that line?

MR. RAY: I have been running warp on filling wind and use two-inch ring. I have not changed the bobbin. I still have 15-16 bobbin. I use two-inch ring, No. 2 flange. I have not heard any complaint. I have not discovered any singling.

THE CHAIRMAN: What gauge frame have you?

MR. RAY: 3-inch gauge.

A MEMBER: I am running 3-0 traveler on turned over rings.

MR. REYNOLDS: It looks as if this thing would resolve itself into the size of ring. The increased spinning conditions are so much better with filling wind that singles will go through if you use the same size ring, but as you better conditions, you can use larger rings, and then you won't have singlings.

THE CHAIRMAN: In using large ring, I use the small bobbin.

THE CHAIRMAN: How about the (Continued on Page 30)

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Hand-to-Mouth Buying

HAND-TO-MOUTH buying is not a sickness—it is only a symptom. It is not a temporary trouble—it may be the outward appearance of a fundamental change in the whole structure of our business life. In the dry goods industry it is affecting the retailer, the wholesaler and the manufacturer and producer at every stage. And it must, of necessity, affect the consumer. Hand-to-mouth buying in many industries is changing manufacturing methods, merchandising methods and banking methods.

I come in close contact with about every kind of business because the bank with which I am connected endeavors to render services intimately related to every phase of merchandising. I have therefore had to give a great deal of thought to hand-to-mouth buying and I have therefore had to give a great deal of thought to hand-to-mouth buying and I have had to listen to every side of it.

One reason why we find it so hard to adapt ourselves to big economic changes like hand-to-mouth buying is a very human one. We dislike to think of abstract things like economic changes—we try to make everything concrete. We try to overcome our helplessness in handling intangible economic forces by blaming somebody for them. We must find somebody whose fault it is—and that somebody is always somebody else. The wholesaler is blaming the retailer for hand-to-mouth buying. The retailer is blaming the manufacturer, the wholesaler and the consumer.

Just what do we mean when we say "hand-to-mouth buying?" If

Address by O. H. Cheney, Vice-President, American Exchange-Pacific National Bank, before National Wholesale Dry Goods Association.

we stop to think for a few minutes we discover that it may mean any or all of a number of different conditions. At different times and by different people it is used to mean:

1. Any irregular buying.
2. Buying in small quantities at a time.
3. Staying out of the market beyond the established buying season.
4. Waiting until the selling season begins and then ordering full stocks for immediate delivery.
5. Waiting until shelves are cleared before buying.
6. Waiting until near the season's end and then buying at cut prices.

We cannot begin to solve the problem until we distinguish between these different conditions. Hand-to-mouth buying is not one problem, but many—each has a different cause and each will require a different solution. In general we may distinguish three main types, which may be called "piecemeal buying," "slow buying" and "strategic buying." These are, of course, frequently combined.

Piecemeal buying by a retailer comes from his desire to keep stocks and investment low and to increase rate turnover.

Slow buying comes from caution as to future conditions of buying or selling, fear of falling price levels, indecision as to style developments, lack of self-confidence, etc.

Strategic buying comes either from careful planning and carrying out of a sound merchandising program or else from a desire to take

shrewd or sharp advantage of the producer or wholesaler or of consuming conditions.

Causes for Hand-to-Mouth Buying. The causes of hand-to-mouth buying may therefore be summarized as follows:

1. The retailer's fear of a buyers' strike and unsold stocks.
2. Constant education of the retailer by manufacturers, Government officials, accountants, experts, etc., on the idea of turnover and profits to be made from increasing it. The retailer learned the lesson only too well—that is, part of it. He has forgotten that there are two parts to a ratio and that turnover can be increased either by increasing sales volume or by decreasing stocks. Being human he has chosen the easiest way, the latter.
3. The retailer's fear of falling wholesale or retail price levels.
4. Rapidly changing styles which put too much strain on the retailer's buying judgment.
5. Quick deliveries because of greater railroad efficiency have encouraged late ordering.
6. The necessity for reducing the growing cost of doing business. The retailer has found that cutting the cost of financing by reducing inventory is one way of reducing costs.

Now, how many of these conditions might be considered justifiable reasons for hand-to-mouth buying at the present time? There is no doubt that several of them can no longer be considered as being any

real influence in retarding buying. There is no present indication of a buyers' strike and as long as manufacturers and distributors do their utmost to keep costs low and prices at reasonable levels there will be no buyers' strike.

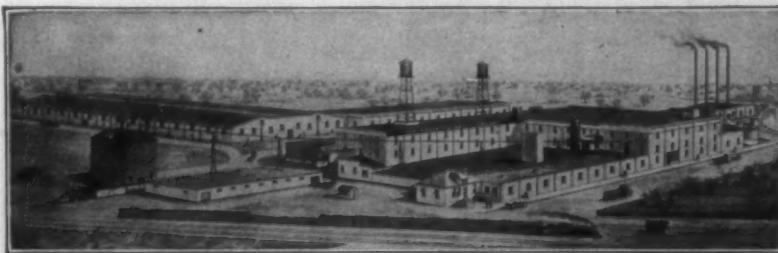
As to the retailer's fear of falling prices. This seems to be an unavoidable result of the hyper-sensitiveness of the dry goods business to conditions in raw material production. This is particularly extreme in the cotton goods field. The fabric manufacturer and the wholesaler must always keep an eye on the weather in Texas, another eye on the temperament of somebody in the Department of Agriculture and a third eye on the ticker in Wall Street. This does not leave many eyes for their own business.

You know how hard it is to walk fast and straight if you keep your eyes on your feet. Well, in the last few years, the dry goods business has been going along watching its feet.

During the coming year prices should be more stable as the general level of commodity prices has been fairly stable for a considerable period. The retailer has no reason to fear a collapse in price levels.

Why then will retailer persist in hand-to-mouth buying? The answers are clear, and there is no use in the calling of names. For one thing the retailer feels that the manufacturer is making him dizzy with the rapid succession of styles. The retailer has learned that he has to keep stocks low or else he may be caught with outmolded goods. The retailer feels also that there is

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no reason why he should carry the financial burden of inventories if he can pass it along to the wholesaler.

What is to be done about it? There is no justification for trying to eradicate hand-to-mouth buying. In the first place, it is here to stay, in some form or another. In the second place, it has its advantages as well as its disadvantages. Before we decide what to do it would be desirable to decide what factors in hand-to-mouth buying are worth keeping and what factors should be eliminated.

Disadvantages.

First let us consider the disadvantages. I shall enumerate the main ones briefly:

1. The retardation of buying is passed back along the line from retailer back to wholesaler to manufacturer and to mill.

2. Production costs are increased all along the line because the hope of efficiency and economy is in quantity production. So are the expenses of selling, packing, transportation and bookkeeping. Hasty production affects quality.

3. The wholesaler and manufacturer have to bear an undue share of the financial burden hitherto borne by the retailer. They have to pay the banking cost of maintaining stocks.

4. The industry is made unstable because it cannot operate on schedule. Employment becomes unsteady.

5. The habit of "shopping" by retailers is encouraged. Their regular wholesalers and manufacturers cannot deliver at short notice and as a result established wholesalers and manufacturers cannot depend on their trade. This also presents opportunities for small concerns with no standing to enter the market in guerilla selling. This also results in higher prices for popular goods bought at the last moment.

6. The dealers tend to slacken their efforts as they do not get the inspiration which comes from stock pressure.

7. Many sales are lost because the low stocks of dealers do not give the customer enough choice.

8. Consumer prices are increased—and ultimately consumer resistance will be increased.

Advantages.

Now, I should like to discuss the advantages of hand-to-mouth buying.

1. It has in it the possibility of overcoming one of the manufacturer's and wholesaler's main troubles—the high peaks and valleys in sales and in manufacturing. You may feel that the industry has adapted itself on a peak-and-valley basis. It has so established itself that we are inclined to forget the enormous price we pay in laying off workers and taking them on, in shutting down machinery and starting it again.

Gentlemen, if by a sensible form of hand-to-mouth buying, you can to some extent even up the peaks and valleys in the sales line, you will be able to even them up in the

production curve. And I feel that the benefits to your industry will be able to keep factories going more steadily and will be able to reduce costs of raw materials, labor and overhead.

2. Hand to mouth buying strengthens the retailer. It increases turnover. He is not burdened with stocks and he does not have to make so many price sacrifices. And the prosperity of the industry depends upon the strength of the retailer.

3. It enables the retailer to follow rapid style changes and thus help his volume insofar as style changes increase volume.

4. It tends to decrease cancellations and returns.

5. It tends to help collections.

6. It has induced a spirit of study and caution in the wholesaler and the manufacturer which are of some economic value.

There are some wholesalers who feel that the solution of hand-to-mouth buying by retailers is hand-to-mouth buying by wholesalers. Such a solution robs the wholesaler of his vital place in the dry goods business. If the wholesaler simply passes the buck he is giving up the result of many years of effort to establish himself as a vital link in the chain of distribution.

After all, the function of the wholesaler is two-fold—the warehousing and the financing. The wholesaler buys ahead in large quantities and sells what the retailer needs when he needs it. He serves the manufacturers by relieving him of the difficulties of merchandising and he serves the retailer by keeping him stocked with the proper goods. Extreme hand-to-mouth buying by the wholesaler performs neither of these two services. Hand-to-mouth buying is and should be the wholesaler's problem more than that of anybody else.

Now no matter from what angle you approach the subject these days you come up against the style question. And this brings me to my first suggestion. Would it be possible to introduce styles in a more orderly fashion—fewer at a time but more frequently and allowing the styles as long a life as necessary? Could new styles be announced regularly according to a program of schedule prepared six months in advance—would that help meet the difficulty? THREE—Hand to mouth Buying o

In order to make such a program effective my second suggestion is to sell these styles to the consumer through strong educational campaigns. Would it be possible, though well-planned and well-executed publicity, to guide the consumer's style sense in the best directions? It is fair to leave all the burden of public education to the retailer?

My third suggestion goes back of these. How do styles originate and where? Do sales follow styles or do styles follow sales? Or does style popularity develop like a snow ball? Does the American woman buy what she likes or does she like what she is told to buy? Who knows the answer to these questions? I feel that style control needs a basis of scientific research into the psychology of style.

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Spinners Meeting in Raleigh

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combination warp and filling build? Has anybody tried that?

MR. MCCOMBS: I put that on one frame. I found it very satisfactory.

THE CHAIRMAN: Some of the mills I visited claimed that they have much better results. I tried it. I have not gone into it very far but so far as I have gone into it I do not see that I got as good results. But you understand that is warp with a filling racket, and it is operated somewhat in this manner (sketch made on blackboard). Some claim they are getting wonderful results from it. The length of the stroke from this point to this point here and the traverse as it seems lets up here and here so as to give the same taper on the bottom and top, and winding off you come from the extreme top down here and there is some question in my mind as to whether it would spool just as good here. Some claim that it does and runs better on spinning.

A MEMBER: I tried that and found it very satisfactory. I had a little trouble sloughing off, but I have not today. I can put more yarn on the bobbin.

THE CHAIRMAN: Than it will on the straight filling build?

A MEMBER: Yes. It runs just as good, but I never tried to spool it. I have had no arrangement with which to spool it.

THE CHAIRMAN: If you can wind it, you should be able to spool it.

A MEMBER: We tried it on spinning and had more tangled work on spinning than we did the other way. That is on No. 44s.

THE CHAIRMAN: Prof. Hilton, have you experimented with that?

PROF. HILTON: I tried first, traverse $4\frac{1}{2}$ on combination, half way on bobbin, and I found that it did not run as good as on filling build. There was more breakage up to that point, and after that less. In regard to the number of yards, I cannot say that we gained any, but it runs better on filling build.

THE CHAIRMAN: Some mills claim wonderful results on that, and if they are true, undoubtedly it must be a step in advance. Mr. Dilling, did you have some trouble?

MR. DILLING: That was on ply yarn. I was running filling wind on twist, and installed Barber-Colman spoolers. When it came from the small part of the bobbin, it would knot on account of running so fast. We changed to warp wind, what Barber-Colman said was necessary to have, and it sloughed off so bad we could not stand the waste and we changed to combination wind, and that runs very satisfactorily by making some changes in it. I do not know that we get as much yarn on the bobbin that way as we would the other ways, either one of the other ways, because we had to make a long taper on it, but it runs very satisfactorily and is the best thing we have found for wet twist ply yarn. The Barber-Colman people claim that with single yarns they can only spool from warp wind and not from filling wind, and I

have found that true in doing it on ply yarn, as filling will lay on the bobbin and one layer will hold others down, so it won't slough off, but wet twist ply yarn was so round that it was not enough fibre for the others to hold it down and suction would cause it to slough off. It seems peculiar but it would do it. I watched it and as the yarn was pulling off from the narrow end of the bobbin from the warp wind I could see yarns pulling out anywhere along there. That yarn coming out would not touch it but the section running 1,000 yards a minute would pull out all along and that is why we could not run warp wind. We changed to combination wind and made certain other changes in the traverse and every time it pulled off here it went off the top and changed so often we never had a chance to pull out there, but single yarn that is not wet twist yarn, one there will hold the other down and not pull it out. In another meeting I made a statement of this kind and the report went out that Barber-Colman would not spool either. That is wrong. I did not say that.

MR. QUINN: If you have to have a sharp stroke, on coarser yarn, it will slough off but on combination it will not. It runs just as good on spinning but you have more breakage on the spooler, for you have a longer stroke. The finer yarn you get the shorter your stroke must be or you will have more breakage on your spooler. That is what a man must look into. These mills run combination, it is practically the same as warp wind. The result is that they do not have as many ends break at the bottom.

MR. RAY: What is the best bobbin to use on filling wind?

THE CHAIRMAN: That is a question well worth while because most of you saw in the trade papers that that question was brought up at Charlotte and after that meeting I wrote a number of the mills to send us a sample of the bobbin that they were using and specifications and you would be surprised to know the difference of opinion or individual ideas that we got in response to that questionnaire. In fact, there were all kinds of bobbins which went from one extreme to the other and it is well worth while for a mill to go into that before a mill changes bobbins. I can only tell you my personal experience. I believe Mr. Buchanan said his bobbin was slightly reversed taper. We had the same except that we have the slight cone on the bottom. Some mills use a perfectly straight bobbin, some run with a cone on the bottom and taper to the top and there are all kinds of stuff on that. In fact, it might be of interest to some of you men if they will republish the information that we got on that to give you some idea of the bobbins that we did find practical.

A MEMBER: In making 44s, 2-ply, we are having some trouble with shaded yarn, off color.

THE CHAIRMAN: Is that in streaks?

A MEMBER: Yes, find a little once in a while like that. Some was in cotton. I want to know if there

(Continued on Page 32)

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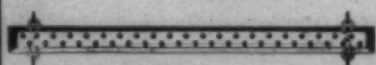
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N. C. Textile School Notes

The North Carolina State College Textile School was well represented at the meeting of the Southern Branch of the Textile Chemists and Colorists Association recently held in Burlington, North Carolina.

Dr. E. C. Brooks, President of the College, was the principal speaker of the evening.

Thomas Nelson, Dean of the Textile School, and Professor A. H. Shaw of the Dyeing Department, were also present and participated in the discussion. They were accompanied by six members of the Senior class who are specializing in Textile Chemistry and Dyeing.

The following Alumni of the Textile School were present:

J. H. Shuford, Class of 1903, National Aniline & Chemical Company, Greensboro, N. C., N. A. Gregg, Class of 1906, superintendent, Elmira Mills, Burlington, N. C., B. E. Shraeder, Class of 1925, assistant textile chemist, Roverside and Dan River Mills, Danville, Va., H. B. Dixon, Class of 1922, overseer of dyeing, May Hosiery Mills, Burlington, N. C., H. B. Summerell, Class of 1923, designers, E. M. Holt Plaid Mills, Burlington, N. C., J. Carter, Class of 1924, Aurora Mills, Burlington, N. C., C. R. Hall, Class of 1924, Eno Mills, Hillsboro, N. C., Ray Harden, Class of 1924, Aurora Mills, Burlington, N. C., M. M. Roberts, Class of 1924, Aurora Mills, Burlington, N. C., S. R. Workman, Class of 1924, National Dye Works, Burlington, N. C.

The Senior Textile students accompanied by Dean Thomas Nelson, Professors A. H. Grimshaw and T. R. Hart, recently chartered a bus and visited the Victory Mills; Tolar, Hart and Holt Mills, and the Holt-Williamson Mills, Fayetteville, N. C.

The bus left College at seven thirty in the morning, returning at six thirty in the evening, after having had a profitable trip among the mills. Several other trips have been planned for these students during the present school year.

Indian Imports of Cotton Piece Goods.

Indian imports of cotton piece goods during the nine months, April to December, 1925, totaled 1,083,751,964 yards, of which 493,825,931 yards were grey goods; 325,771,780, bleached; and 264,154,253 yards, colored, states a report to the Department of Commerce from Trade Commissioner C. B. Spofford, Calcutta. Of the grey goods, Great Britain furnished 78 percent and Japan 15.

Hosiery Imports into Greece.

The most popular type of women's hosiery in the Greek market at the present time is a very light weight mercerized cotton article which is being obtained principally from Germany, Consul General Arthur Carrels, Athens, informs the Department of Commerce. The Department of Commerce. The colors in demand are white, black, grey, tan, flesh, and other light shades. Total imports of cotton hosiery during 1924 amounted to 262,600 kilos, of which Germany furnished 98,900 kilos; Italy, 62,400, and the United States, 12,700.

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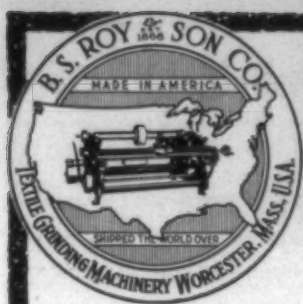
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Spinners Meeting in Raleigh

(Continued from Page 30)

is anything outside of cotton that will make shaded yarn.

MR. DILLING: The amount of twist at times will affect the color of it. Sometimes you put more twist in and it looks as if the yarn is made of a different cotton. Change the twist and it looks different. Some kinds of cotton will take twist better than others, but I do not see that that would make it shaded or streaked. Which is it? I do not know what that can be.

A MEMBER: Some people say too much water getting on the twist rollers makes it corrode and that runs faster. I don't know what it could be.

THE CHAIRMAN: That is wet twist?

MR. DILLING: A certain kind of water action on brass roll which would cause it. I do not know but that might be possible.

MR. McCOMBS: Carding the cotton has quite a good deal to do with it. I have had trouble with shaded yarn, especially in very fine numbers. I remember running Egyptian stains 120, 2-ply. Your carding has as much to do with it as anything else. If you use reverse twist and straight it will have a tendency to bring the fibres out. Take cloudy carding and that will cause it, some of the cards being in bad condition and some in first class condition. I have had that trouble. In New York State when we were spinning very fine yarn we had a great deal of trouble. We had two card rooms. In No. 2 we found it was bad cloudy work. We were using the same cotton, but whenever that sliver came together it would have an entirely different effect on the finished yarns.

THE CHAIRMAN: Before we go further, Hammond D. Patton, who is with the American Society of Mechanical Engineers, wants to say a few words, so we will give him five minutes' time.

Mr. Patton explained the advantages that mill men might find in affiliating with the American Society of Mechanical Engineers.

On motion of Mr. Dilling, duly seconded, the thanks of this body is extended to the State College for the privileges enjoyed in meeting here and for the warm hospitality extended. (Rising and applause.)

THE CHAIRMAN: There has been one question put for discussion. I will give it and leave it for Mr. Gilbert and Mr. Black to discuss in regard to even distribution of twist and single yarns. In other words, he has tested yarns and it shows uneven twist. It shows 16 to 26 on the same thing. That is uneven distribution and he wants to know some remedies for it. If anybody can help on that I would be glad to hear. How about that, Professor Nelson and Professor Hilton?

PROF. HILTON: I have not gone into the twist on spinning but on slubbers and you will find the same variation of twist even with gear drive, and we came to the conclusion it was the uneven work. Your twist went to the smallest part of

the roller. I think it would be the same on spinning roller.

MR. DILLING: I would like to ask Prof. Hilton how long a piece does he test that piece in on single yarn.

PROF. HILTON: We made it on the spinning frame 5 inches — 3 inches in other cases.

THE CHAIRMAN: There are a good many here who want to catch the 3:30 train so I expect we will have to adjourn now. If there is nothing else now we will adjourn. I wish to thank you gentlemen for the support you have given and I trust you have gotten something from the meeting.

On motion, duly seconded, the meeting adjourned.

Among Those Present.

Among those who attended the Spinners' Meeting in Raleigh were: Allen, J. F., Spinner, Caswell Cotton Mills, Kinston, N. C. Atkinson, A. C., Supt., Clayton Cotton Mills, Clayton, N. C. Blackwood, A. J., Durham Hosiery Mills, Carrboro, N. C. Blair, Wm. G., Armstrong Cork & Insulating Co. Brooks, E. C., President, State College, Raleigh, N. C. Buchanan, S. D., Erwin Mfg. Co. No. 4, West Durham, N. C. Burns, D. F., Durham Hosiery Mills, Durham, N. C. Byrd, W. T., Erwin Cotton Mills Co., W. Durham, N. C. Cassada, J. D., Student, State College, Raleigh, N. C. Clark, David, Managing Editor, Southern Textile Bulletin, Charlotte, N. C. Clark, Jno. W., Pres., Randolph Mills, Franklinville, N. C. Cobb, F. Gordon, Gen. Mgr., Lancaster Cotton Mills, Lancaster, S. C. Colvin, L. E., Caraleigh Mills, Raleigh, N. C. Coggin, Geo. W., State Supervisor, Industrial Education, Raleigh, N. C. Creech, J. O., Mobile Cotton Mills, Selma, N. C. Deans, A. B., Mgr., Wilson Cotton Mills, Wilson, N. C. Dilling, Marshall, Supt., A. M. Smyre Mfg. Co., Gastonia, N. C. Dobbins, G. W., Student, State College, Raleigh, N. C. Earnhardt, W. A., Master Mechanic, Bellevue Mfg. Co., Hillsboro, N. C. Engle, J. W., Carder and Spinner, Elmira Cotton Mills, Burlington, N. C. Erwin, W. A., Jr., Erwin Cotton Mills, W. Durham, N. C. Escott, G. S., Associate Mgr., American Wool and Cotton Reporter, Charlotte, N. C. Fagan, J. H., Myers Mills, Inc., Gastonia, N. C. Frissell, F. D., Textile World, New York. Gilbert, L. R., Caraleigh Mills Co., Raleigh, N. C. Gregg, J. M., Lancaster Cotton Mills, Lancaster, S. C. Haddock, J. H., Erwin Cotton Mills Co., W. Durham, N. C. Hamrick, G. A., Overseer, Pacific Mills, Lyman, S. C. Harris, Carl R., Asst. Supt., Inman Cotton Mills, Inman, S. C. Hart, T. R., Textile School, State College, Raleigh, N. C.

Harte, Nelson N., Student, State College, Raleigh, N. C.
 Haskins, L. L., Akron Belting Co., Greenville, S. C.
 Hill, D. H., Sou. Textile Bulletin, Charlotte, N. C.
 Hill, Norman B., Supt., Caswell Cotton Mills, Kinston, N. C.
 Hilton, John T., Asso. Prof., N. C. State College, Raleigh, N. C.
 Isley, Geo. W., Virginia Mills, Swepsonville, N. C.
 Jackson, A. B., O-Weaving, Puritan Mills, Fayetteville, N. C.
 Jennings, W. J., Supt., Carolina Cotton Mills, Graham, N. C.
 Jones, D. C., Supt., Patterson Mills Co., Rosemary, N. C.
 Knight, C. I., Student, State College, Raleigh, N. C.
 Knight, R. H., Pearl Cotton Mill, Durham, N. C.
 Lane, J. C., Hart Cotton Mill No. 1, Tarboro, N. C.
 Lanier, D. F., Oxford Cotton Mills, Oxford, N. C.
 Lockey, J. F., Liberty Cotton Mill, Clayton, N. C.
 Love, F. R., Textile Student, State College, Raleigh, N. C.
 Lyda, O. J., Carder, Myers Mills, Gastonia, N. C.
 Mahaffey, D. B., O-Carding and Spinning, Bellevue Mfg. Co., Hillsboro, N. C.
 McCombs, J. V., Gen. Supt., Hart Mills and Fountain Mills, Tarboro, N. C.
 McGee, J. E., Rosemary Mfg. Co., Rosemary, N. C.
 McVicker, C. C., Carder and Spinner, Fountain Mills, Tarboro, N. C.
 Mitchin, E. C., Textile Student, State College, Raleigh, N. C.
 Moore, G. B., Spartanburg, S. C.
 Mullen, T. W., Rosemary Mfg. Co., Rosemary, N. C.
 Nelson, Thos., Prof., State College, Raleigh, N. C.
 Page, C. C., Second Hand Spinning, Pacific Mills, Lyman, S. C.
 Pantan, Harrison D., Pres., Harrison D. Pantan & Co., Mill Engineers.
 Peasley, Chas. D., National Ring Traveler Co., Charlotte, N. C.
 Phillips, J. T., Supt., Kinston Cotton Mills, Kinston, N. C.
 Philip, Robert W., Associate Editor, Cotton, Atlanta, Ga.
 Phillips, W. C., Caswell Cotton Mills, Kinston, N. C.
 Prince, C. C., Borden Mfg. Co., Goldsboro, N. C.
 Quinn, Peter T., Draper Corp., Atlanta, Ga.
 Ray, Geo. W., Brookford Mills Co., Brookford, N. C.
 Reynolds, Supt., Eastern Mfg. Co., Selma, N. C.
 Richardson, W. U., Weaver, Caraleigh Mills, Raleigh, N. C.
 Rochester, W. S., Hart Cotton Mill No. 2, Tarboro, N. C.
 Rogers, L. W., Randolph Mills, Franklinville, N. C.
 Runge, D. E., Draper Corp., Atlanta, Ga.
 Shipp, Geo. F., Supt., Wilson Cotton Mills, Wilson, N. C.
 Springs, L. A., Mgr., Union Cotton Mills, Maiden, N. C.
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Southern Spinners Bulletin

The weekly bulletin of the Southern Yarn Spinners' Association follows:

The yarn market remains quiet with but little trading other than small lots for prompt deliveries. Recently sizable inquiries for future deliveries have developed but without results as buyers are inclined to believe that prices will ultimately be lower.

Based on yesterday's New York Spots at 20.70 quotations of 40½ for 20's two ply warps, 42 cents for 30's single hosiery cones and 35-50 for 12's single skeins, the manufacturing margins do not represent replacement value, being only 12.07 for 20's two ply warps, 13.07 for 30's hosiery cones and 7.47 for 12's single skeins.

New York Spots quotations, however do not represent the actual price spinners have to pay for cotton. For middling upland ⅞ to one inch staple a premium of at least 350 points on New York Spots quotations would be required, which show a manufacturing margin, based on the above yarn prices, of 8.21 for 20's two ply warps, 9.19 for 30's hosiery cones and 3.58 for 12's single skeins.

Taking these conditions into consideration, the spinners' attitude of firmness of prices can be readily understood. Buyers apparently do not appreciate the fact of the material difference in the price between actual spinnable cotton and New York Spots quotations.

Spinners are holding their prices firm and are not interested in business at the present level of prices, having sufficient business already booked to keep their mills in operation for several weeks to come.

Yarn Shipments for December Announced.

Washington, D. C.—Domestic exports of carded yarns, not combed, during December totaled 1,468,807 pounds valued at \$586,091.21, according to figures made public by the Department of Commerce.

During the same month, combed yarns was exported in the amount of 690,338 pounds valued at \$510,466. Sewing thread exported totaled 79,299 pounds valued at \$84,405, and crochet, darning and embroidery cotton was exported to the extent of 21,289 pounds valued at \$28,387.

Month's Cotton Duck Exports 1,074,122 Yards.

Washington, Feb. 2.—Domestic exports of cotton duck all kind during December totaled 1,074,122 square yards valued at \$474,566, figures made public by the Department of Commerce.

Of the total exportation, 780,910 square yards valued at \$368,857 were unbleached, 225,487 square yards valued at \$23,002 colored.

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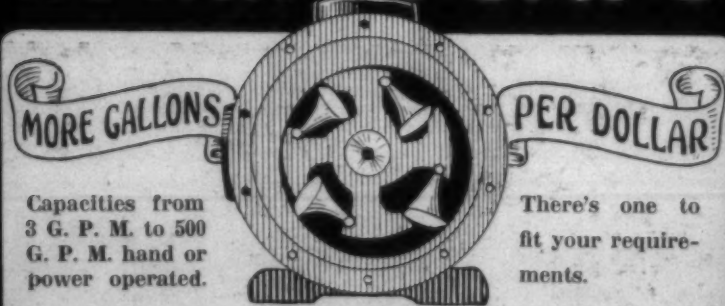
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Cotton and the Cotton Market

LOOKING Ahead, the cotton trade is still awaiting the inspiration which it expects to find in the development of new crop prospects. Prices may seem low as compared with recent previous years but it is generally realized that they may go still lower should the surplus crop of this season be followed by another large production. On the other hand, ample as present supplies would appear to be it is quite as generally realized that they are not large enough to prevent an advance should the new crop outlook be seriously clouded by a substantial reduction in acreage or an unfavorable planting season. Such reflections, of course, merely emphasize the new crop outlook as the factor likely to determine the trend of end-season values and the disposition to await, rather than try to discount, the outcome of the uncertainty is promoted by the fact that conflicting influences of the present appear so well balanced at the prevailing level of prices. Exports have been falling off, but cotton goods in Lancashire are moving more freely. There is no evidence of an unsatisfied spot demand, but on the other hand no convincing indication of unabsorbed offerings in the South. More contracts appear for sale in the futures market on advances, but demand develops on the declines. The market which at one moment appears idle, at the next shows an ability to absorb spurts of selling or to supply thrurries of buyings within a surprisingly narrow range. As a natural result we have the semblance, at least, of stabilization and it remains to be seen whether the balance will be disturbed by trade developments within the next few weeks, or whether we shall have to wait on new crop prospects for any material change in trading levels.

There are those who expect increased spot offerings in the South with the approach of the planting season. During the past week such expectations have been rather encouraged by reports of an easing basis in the Southern spot markets, and the fact that exports are now falling behind last year's. Rumors that some cotton is to be shipped back to this country from Liverpool have also encouraged the reactionary or bearish view of the market. It may be, of course, that the South still has more cotton on hand than it will wish to carry into the season of active farm work and that recent reports of an easier basis have foreshadowed liquidation of spot holdings before the winter is over. If so, however, there has been nothing in the action of the futures market here to reflect it. The demand from near month shorts has been reduced since the holidays. Nevertheless, March has maintained a premium over May, while the stock of certified cotton in New York has been reduced to about 48,000 bales.

Thus it would seem that even if the South has eased somewhat, it has not yet weakened to a point which would mean shipments for delivery in the contract markets. Price fixing has been a sustaining factor on declines below the 19½

cent level for May, and trade buying continued to make its appearance on dips around the 18 cent level for October.

The reports of reshipments of American cotton from Liverpool to New York or New England have been rather inconclusive. It seems to be understood that some cotton is coming back, and quite definitely reported that a few thousand bales of American staples have been bought in Liverpool for a New England mill which was in need of a certain grade and staple and found it available on better terms in Liverpool than in the South. The fact Liverpool has been so far below a parity with American markets, that allowing for the difference between net and gross weights, cotton could almost be returned here without loss, has rather predisposed the trade to exaggerate the talk of possible reshipments. This disparity, however, would appear to have been partly due to variations in difference between grades in the Liverpool market as compared with the differences prevailing in American futures markets. Moreover, the Continent has been buying cotton in Liverpool on a considerable scale since the first of the month, and the stock of American cotton in Liverpool is now diminishing, having fallen about 110,000 bales behind last year. In other words, the relatively cheap market has attracted buyers, and with Lancashire trade picking up there may be a revival in the demand from British importers in the South this spring.

No fresh light of importance has been thrown upon the prospects of the coming acreage or new crop crop. It is most generally admitted that in one respect at least preliminary conditions bearing upon the coming crop possibility are more favorable than they were last season. Winter rainfall in the South has been rather unevenly distributed, but there will be a better season in the ground in the Southwest, which may help the crop through a summer drought. In no other respect, however, does there appear to be any ground for more than ordinary hopefulness over the outlook. Traders may not take the agitation for reduced acreage very seriously, but the lower level of prices certainly raises a question as to whether the less advantageously situated grower will plant quite as much as he did last year, and of course the possibility of boll weevil damage is recognized. According to the report of the Census Bureau on the production and distribution of cotton for the season of 1924-25, the percentage of damage to the crop of 1924 by insects was only 12.0 per cent, compared with 26.6 per cent the previous year and 35.4 per cent in 1921 when insect damage was the highest on record. No estimate as to the percentage of damage by insects during 1925 is yet available, but it was probably less than in 1924. The immunity of both 1924 and 1925, however, may be attributed chiefly to the character of the weather during the growing season and the thing needed to really establish confidence in the productive capacity of the South is a large yield following a cool and wet summer.

Advices from the dry goods trade

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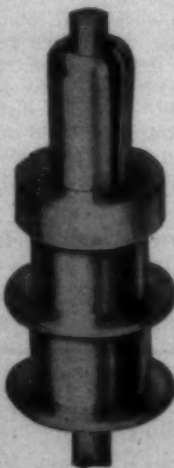
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have been more encouraging than otherwise. Business in the domestic markets tapered off somewhat following the mid-month activity, and has been rather disappointing from the bullish standpoint. At the same time, and even if it is not developing into the boom which some had hoped for, it has been sufficient to promote a continuance of mill activity, and the situation is all the healthier for the conservatism which prevails with reference to buying for anticipated needs. Meanwhile, the news from Manchester has been distinctly favorable, and it is quite possible that Lancashire mill activity for the last four or five months of this season will in some measure compensate for the present increase in curtailment.—Commerce and Finance.

Conditions in Textile Field Are Improving

Richmond, Va.—With the exception of agriculture, 1925 was a better business year in the fifth Federal reserve district than was 1924, according to the monthly report of the Federal Reserve bank of Richmond. In agriculture, the report shows, there was some recessions, although distinct improvement over the preceding year. Both tobacco and cotton production in the two Carolinas exceeded 1924 production, but tobacco prices were a little lower than for the year 1924.

Earlier fall trade is shown, this being attributed in the report partly to weather conditions and partly to the lack of pre-election uncertainty that prevailed in 1924. In all, business in the fifth district is shown to be up to the seasonal average during December, 1925, although the increase in trade was not as marked as the increase for November over November of the previous year.

"Conditions in the textile field improved last year over conditions existing in 1924," the report sets forth, "as indicated by a 1925 increase of 326,982 bales in cotton consumption by fifth district mills. Buying of textiles was on a hand-to-mouth basis all year, and power shortage cut operating time seriously last summer and fall, but a large volume of orders for prompt shipments was placed, and the mills kept moderately busy without the necessity of accumulating stocks of manufactured goods. As 1925 closed, there were signs of a distinct broadening in the demand for textiles and forward orders were beginning to reach the mills."

Coal production is shown to be above the 1924 level, while construction work is somewhat lower. Debits to individual, firm and corporation accounts at clearing house banks in 23 of the district's leading cities totaled an increase of more than a billion and a half dollars over the 1924 total.

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Cotton Goods

New York. — Business in cotton goods continued on a moderate basis during the week. Unfinished lines moved fairly well, but large sales were lacking. Prices were fairly steady. In the finished goods division buyers continued to operate on a hand to mouth basis and where contracts were placed, few of them ran more than sixty days ahead. There were a few sales of gray goods for delivery in the second quarter of the year. A somewhat better business in sheets and pillow cases developed as a result of the lower prices, the basis being five to eight per cent lower than the last list.

The demand for printed wasa goods in cotton, cotton and rayon and silk and cotton continued better than for the woven and piece dyed goods. Trading covered voiles pongees, broadcloths and fine constructions of plain and dobby goods.

More general scattered sales of print cloths, sheetings and convertibles were reported toward the close of the week. Sales of spot 38½-inch 64x60s were made at 8½ cents; 72x76s, 11 cents; 4-yard 80s (East), 12½ cents; 7.15s at 6½ cents, and 7.25s at 6½ cents. Sheetings sold at 7½ cents for 5-yard, 24-inch; 7½ cents for 5.50s and 7½ cents for 5-yard (36-inch, March deliveries. February goods are now very closely sold at current prices. Some 3-yard goods were sold at 11½ cents. Sateen sold at 12½ cents for 4.37s, and some mills now ask 12½ cents. There was not much doing in drills or osnaburgs. There is quite an irregularity in quotations.

Trading in fine goods was confined to small quantities of spots and nearby deliveries. It has become easier for buyers to find spot 144x76s combed broadcloth at 22½ cents and 128x68s at 18½ cents for best makes. Mills sold best grade domestic cotton 120x64s, 2x1, at 30½ cents. Combed 112x60s sold at 16½ cents and half combed 16 cents.

Mills that sold carded 100x64s broadcloths at 13½ cents are now asking 12½ cents for their spots. It makes it more difficult to find yardage at the lower figure. There are mills that have consistently refused to trade their 100x60s at 13 cents, holding for 13½ cents. Buyers are able to find yardage on the lower basis. It is possible to locate spot 112x60s carded at 14½ cents, though a number of producers ask ¼ cent more. Contracts have held at 14½ cents.

A number reported it was difficult to find spot 88x48s carded warp at 10½ cents. Contracts were quoted 10½ cents for March-April East and

10½ cents to 10½ South. An inferior Eastern make was said to be available at 10½ cents, spot or contract. There were sales of 110x60s carded stripes which continue quoted 14½ cents for March forward and 14½ cents April forward.

Both in broadcloths and warp sateens the demand has continued largely of a spot or nearby nature. The business in broadcloths has been only moderate this week, with the majority of houses, but there is some call right along. Nearby deliveries of 100x60 carded have sold at 13 c, and of 100x64 carded have sold at 13½ cents, good makes. For the 90x60, 4.32 yard, 12½ cents was the quotation. Certain goods makes of 128x68, all-combed, have held to 19 cents, while less is heard of styles slightly under these qualities. The poorer makes are reported at 18½ to 18½ cents.

Spot deliveries of warp sateens in most construction under 140x72 are generally reported in limited supply, both stripes and plains. The buying of the last two weeks, has fairly cleaned up the market on a few numbers, particularly the 88x48 carded reverse twist. Orders at 10½ cents at Fall River for spots were found difficult to fill, for March, 10½ cents was considered possible.

The Fall River print cloth market was somewhat less active last week, with the result sales fell off to 75,000 pieces, which is considered a conservative estimate. Buyers were looking for quick goods, but in a number of constructions none were available. This factor alone prevented sales from being much larger.

Sateens and 36-inch cloths were the feature of the week, with prices showing a firmness. Mill were generally holding for better prices and in some cases buyers met the advances, especially where quick goods were available. The 36-inch numbers have been unusually active and a number of styles have been cleaned out.

Cotton goods prices were as follows:

Print cloths, 28-in., 64x64s	6%
Print cloths, 28-in., 64x60s	6%
Print cloths, 27-in., 64x60s	6%
Gray goods, 38½-in., 64x64s	9%
Gray goods, 39-in., 68x72s	10%
Gray Goods, 39-in., 80x80s	12½
Brown sheetings, 3-yard...	12%
Brown sheetings, 4-yard...	10%
Brown sheetings, stand...	13%
Ticking, 8-oz.	22
Denims	17½
Staple gingham, 27-in....	9
Kid finished cambries....	9 a10
Dress gingham,	13½ a17½
Standard prints	9½

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Extra staples, and good 1-16 and 1¼ cotton from Arkansas, Oklahoma, and Texas, and Memphis territory.

The Yarn Market

Philadelphia, Pa.—While inquiry for cotton yarns was fairly general last week and covered a wide range of numbers, actual sales were almost entirely limited to small quantities wanted for delivery in the near future. They were a few sales running for six weeks ahead, but these were exceptions. Buyers are apparently convinced that they will be able to purchase yarns at lower prices, while spinners are holding firm with sufficient business in hand to keep plants busy for some weeks.

The insulating trades were actively interested in yarns for delivery in March and April, but the price differences between buyers and sellers prevented any large amount of business. The demand for carded weaving yarns continued to be slightly better than for knitting yarns. Brokers reported a good spot demand for many numbers and moved such yarns promptly wherever they could be had. Stocks are still small and on some counts extremely low. Spinners prices continued very firm. In a few instances inquiry for large quantities of yarns developed a few scattered cheap yarns, but these instances were rare.

There has recently been more interest in yarn for export purposes and inquiry holds promise of developing some active business for foreign markets.

Prices in this market were reported as follows:

Southern Two-Ply Chain Warps.	
8s	35 a
10s	36 a
12s	37 a
14s	37 1/2 a
16s	38 1/2 a
20s	41 1/2 a
24s	42 a
26s	43 a
30s	45 a 46
40s	55 1/2 a 56
40s ex.	56 a 60
50s	65 1/2 a 66
Southern Two-Ply Skeins.	
8s	34 1/2 a
10s	35 a
12s	36 a
14s	37 a
16s	37 1/2 a
20s	37 1/2 a 38
24s	40 1/2 a
26s	42 a 42 1/2
30s	44 a 1/2
36s	51 1/2 a
40s	54 a
40s ex.	58 a 60
50s	64 1/2 a 65
60s	71 1/2 a
Tinged Carpet	3 and 4-ply 31 1/2 a
White Carpet	3 and 4-ply 33 1/2 a 34
Part Insulated Waste Yarns.	
6s, 1-ply	29 a
8s, 2, 3 and 4-ply	30 a 30 1/2
10s, 1-ply and 3-ply	32 1/2 a
12s, 2-ply	33 1/2 a
16s, 2-ply	35 1/2 a

20s, 2-ply	36 1/2 a
26s, 2-ply	41 a 41 1/2
30s, 2-ply	42 1/2 a
Duck Yarns—3, 4 and 5-Ply.	
8s	33 1/2 a
10s	34 1/2 a
12s	35 a
14s	36 a
16s	37 a
20s	37 1/2 a 38
Southern Single Chain Warps	
10s	34 1/2 a
12s	35 1/2 a
14s	36 1/2 a
16s	37 1/2 a
20s	38 1/2 a
24s	40 1/2 a
26s	41 1/2 a
30s	43 1/2 a
40s	54 1/2 a
Southern Single Skeins.	
6s	33 1/2 a
8s	34 a
10s	34 1/2 a
12s	35 1/2 a
14s	36 1/2 a
16s	37 1/2 a
20s	37 1/2 a
24s	39 1/2 a 40
26s	40 1/2 a 41
30s	40 1/2 a 41
40s	54 1/2 a
Southern Frame Cones	
8s	33 1/2 a
10s	34 a
12s	34 1/2 a
14s	35 a
16s	35 1/2 a
18s	36 1/2 a
20s	37 1/2 a
22s	38 a
24s	39 1/2 a 40
26s	40 1/2 a 41
28s	42 a
Tying in	40 1/2 a 41
30s	42 a 44
40s	51 a 52
Southern Combed Peeler Skeins, Etc.—Two-Ply.	
16s	56 a 60
20s	58 a 62
24s	65 a 67
26s	75 a 80
40s	80 a 85
50s	87 1/2 a 90
60s	90 a 95
70s	1 05 a 1 10
80s	1 18 a 1 20
Southern Combed Peeler Cones.	
10s	48 a 49
12s	49 a 50
14s	49 1/2 a 50 1/2
16s	52 1/2 a
18s	51 a 52
20s	52 a
22s	53 a
24s	56 a
26s	56 1/2 a
28s	57 a
30s	60 a
32s	62 a
34s	65 a
36s	72 a
38s	74 a
40s	75 a
50s	80 a
60s	90 a 95
70s	1 05 a
80s	1 15 a
Eastern Carded Peeler Thread—Twist Skeins—Two-Ply.	
20s	50 a
22s	51 a
24s	56 a
30s	59 a
36s	63 a
40s	65 a
45s	70 a
50s	75 a
Eastern Carded Cones.	
10s	39 a
12s	40 a
14s	41 a
20s	42 a
22s	45 a
26s	49 a
28s	51 a
30s	53 a

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3000 new style medium Whitin gravity spindles.
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A very complete and modern Cotton Mill Machinery equipment of 5,000 spindles and 100 looms and all auxiliary machinery and supplies and transmission. This machinery is Whitin make. We offer it at a very attractive price, for the reason that it was badly located, and we have sold the buildings to be used for another purpose, and wish to vacate as early as practicable.

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WANT position in mill office as book keeper, auditor, paymaster or cost accountant. Would take place in superintendent's office. Full graduate from textile school and have considerable mill experience. No. 4734.

WANT position as overseer fancy cloth room or finishing department. Have had 18 years experience in finishing room, including experience on chambrays and ginghams. Good references. No. 4735.

WANT position as overseer of carding or spinning. Reliable man of long experience who can furnish satisfactory references. No. 4736.

WANT position as overseer weaving on sheetings, print cloth, drills, duck, or osnaburgs. Eight years as night overseer and second hand in large mill. I. C. S. graduate in warp preparation and plain weaving. Age 39. Married, sober, now employed. Good references. No. 4737.

WANT position as master mechanic. Experienced on both steam and electric drive and am hard worker who can run your job right. References. No. 4738.

WANT position as master mechanic or machinist. Steam or electric drive, can handle turbines, engines, generators and am first class all around man. No. 4739.

WANT position as superintendent of yarn or cord fabric mill. Age 33, married, have been with large mill for past 8 years, 3 years as assistant superintendent. Good reasons for wanting to change and can give good references. No. 4740.

WANT position as superintendent or overseer carding in large mill. Long practical experience and can give first class references. No. 4741.

WANT position as overseer spinning in good mill. Can come on short notice. Experienced, reliable man of good habits and character and can give suitable references. No. 4742.

WANT position as overseer carding or spinning, or assistant superintendent of yarn mill. Long experience and can furnish references to show character and ability. No. 4743.

WANT position as overseer carding and spinning or second hand. Have had several years experience. Am I. C. S. graduate. Age 30, references. No. 4744.

WANT position as overseer of carding spinning with good Southern mill. Experience and training qualify me as first class man in every respect. No. 4745.

WANT position as superintendent, carder or spinner. Prefer North or South Carolina. Now employed. First class references. No. 4746.

WANT position as overseer weaving. Experienced on wide variety of goods and can run the job in thoroughly competent and satisfactory manner. No. 4748.

WANT position as overseer spinning, twisting and winding. Excellent references to show long record of satisfactory service. No. 4749.

WANT position as superintendent of small mill or carder and spinner in larger one. Experienced reliable man who can give first class references to show character and ability. No. 4750.

WANT position in slashing, drawing-in, spooling or warping department. Am young man, I. C. S. graduate and can keep production up and seconds down. Good references. No. 4751.

WANT position as master mechanic; 13 years experience in mill steam plant and machine shop. Can furnish good references from previous employers. No. 4752.

WANT position as superintendent of cloth mill. Long experience on many fabrics and can get results. Fine references. No. 4753.

WANT position by practical weaver of long experience. Have been overseer for past two years, also second hand for four years. Understand plain, dobby and box weaving. Best of references. No. 4754.

WANT position as overseer spinning or would take good second hand's place. Long experience and good references to show character and ability. No. 4755.

WANT position as overseer weaving, 21 years experience in mill, 11 years in weaving. Age 36, married, now employed. Can furnish good references. No. 4756.

WANT position as overseer plain weaving, or would consider place as second hand in large mill. Have had about 20 years' experience, mostly on plain weaving. Good references. No. 4757.

WANT position as carder, spinner or both. Now employed as spinner. Have had 25 years experience in carding and spinning, 10 years as overseer. Good habits and can give good references. No. 4758.

WANT position as carder or spinner in large mill or superintendent of smaller mill. Would like opportunity to submit references showing my record. No. 4759.

WANT position as overseer carding. Can run any card room and run it right. Best of references from past employers. Can come on short notice. No. 4760.

WANT position as carder or spinner or either, pay to be at least \$36 weekly. Can come on short notice and give references to show ability and character. No. 4761.

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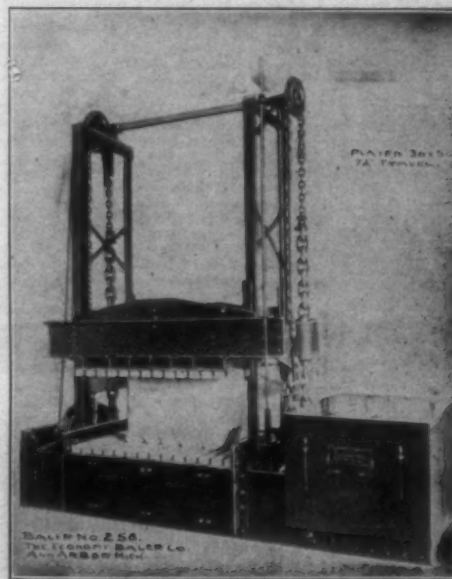
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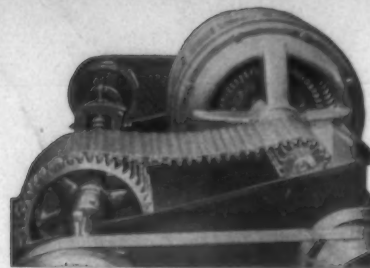
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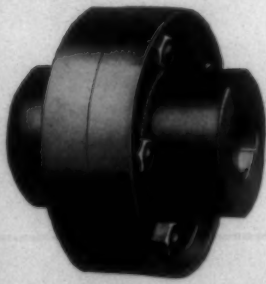
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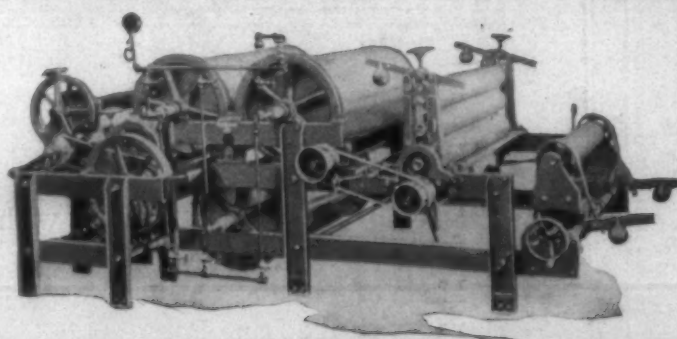
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